

show files;t 5/3,k/all
 File 344:Chinese Patents ABS Apr 1985-1999/Dec
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 File 347:JAPIO OCT 1976-1999/SEP(UPDATED 991229)
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 File 351:DERWENT WPI 1963-1999/UD=, UM=, & UP=199954
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 File 371:FRENCH PATENTS 1961-1999/BOPI 9952
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5/3,K/1 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO
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06296388 **Image available**
 DEVICE AND METHOD FOR GENERATING OBJECT-ORIENTATED OPTIMIZED **CODE**

PUB. NO.: 11-237980 [JP 11237980 A]
 PUBLISHED: August 31, 1999 (19990831)
 INVENTOR(s): NARISAWA FUMIO
 NAYA EIKO
 YOKOYAMA TAKANORI
 OOKAWA KEIICHIROU
 APPLICANT(s): **HITACHI** LTD
 APPL. NO.: 10-038329 [JP 9838329]
 FILED: February 20, 1998 (19980220)

DEVICE AND METHOD FOR GENERATING OBJECT-ORIENTATED OPTIMIZED **CODE**

APPLICANT(s): **HITACHI** LTD

ABSTRACT

PROBLEM TO BE SOLVED: To provide a **code** generator for optimizing a
 code which can be applied to an integrated control system without
 increasing a required memory capacity...
 ...activates a specification analysis part 106 and performs phrase analysis
 or grammar analysis. Next, an **object**-**oriented** function excluding
 part 107 is activated and based on function selection items, stored in the
 storage device 104, a non-specified function is determined. Then, a
 code generating part 108 is activated, and based on the software
 specification for which the phrase...

... or grammar analysis is performed by the specification analytic part 106
 and on the output **code** pattern determined by the **object**-
 oriented function excluding part 107, **code** generation is performed.

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5/3,K/2 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO
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06097629 **Image available**
 AUTOMATIC SOURCE **CODE** GENERATION SYSTEM

PUB. NO.: 11-039148 [JP 11039148 A]
 PUBLISHED: February 12, 1999 (19990212)
 INVENTOR(s): UCHIDA MASAKO
 YOSHINO SADA0
 APPLICANT(s): **HITACHI** INF SYST LTD
 APPL. NO.: 09-198485 [JP 97198485]
 FILED: July 24, 1997 (19970724)

AUTOMATIC SOURCE **CODE** GENERATION SYSTEM

APPLICANT(s): **HITACHI** INF SYST LTD

ABSTRACT

... an existing program resource obtained by program development using a structured programming method and an **object** **oriented** programming relating to an automatic generator system of a source **code** effectively reusable as the existing program asset.

SOLUTION: Specification relating information for a new application...

... on the specification relating information, a file/DB information processing part 2A generates a source **code** provided with an 'object' for realizing input/output processings, a pattern information processing part 2B generates a source **code** provided with the 'object' corresponding to a determined processing pattern and a customization information processing part 2C generates a source **code** provided with the 'object' for realizing an intrinsic processing respectively. A source file output processing part 2D outputs the generated source **codes** respectively to prescribed source files based on the specification relative information.

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5/3,K/3 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO

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06065888 **Image available**

DATA DISPLAY SYSTEM IN **OBJECT**-**ORIENTED** PROGRAM

PUB. NO.: 11-007399 [JP 11007399 A]

PUBLISHED: January 12, 1999 (19990112)

INVENTOR(s): YOKOYAMA NAOYUKI

KAMEDA TATSUYA

INO KOICHIRO

APPLICANT(s): **HITACHI** LTD

APPL. NO.: 09-159501 [JP 97159501]

FILED: June 17, 1997 (19970617)

DATA DISPLAY SYSTEM IN **OBJECT**-**ORIENTED** PROGRAM

APPLICANT(s): **HITACHI** LTD

ABSTRACT

...attributes of plural other instances related by an instance generated in a list in an **object**-**oriented** program and to simultaneously update a database by changing a value of the list of the outputted attributes in an **object**-**oriented** database.

SOLUTION: A source **code** is read, classes existing in the read source **code** are displayed in the list, the class and the attributes to be displayed are selected...

5/3,K/4 (Item 4 from file: 347)

DIALOG(R)File 347:JAPIO

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05650590 **Image available**

PROGRAM AND SPECIFICATION GENERATION METHOD

PUB. NO.: 09-265390 [JP 9265390 A]
 PUBLISHED: October 07, 1997 (19971007)
 INVENTOR(s): TSUKUDA GUNJI
 DANNO HIROBUMI
 APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
 JP (Japan)
 APPL. NO.: 08-074551 [JP 9674551]
 FILED: March 28, 1996 (19960328)

APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
 ...

ABSTRACT

PROBLEM TO BE SOLVED: To provide a technique capable of improving software productivity by an **object-oriented** language...

... classes are related by the key data item and the class kind (102) and the **code** of the class is generated corresponding to relation among the classes (106 and 107). Then...

5/3,K/5 (Item 5 from file: 347)

DIALOG(R)File 347:JAPIO
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05564938 **Image available**
OBJECT-ORIENTED LANGUAGE PROCESSING METHOD AND PROCESSOR

PUB. NO.: 09-179738 [JP 9179738 A]
 PUBLISHED: July 11, 1997 (19970711)
 INVENTOR(s): NAYA EIKO
 FUKUNAGA YASUSHI
 APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
 JP (Japan)
 APPL. NO.: 07-338572 [JP 95338572]
 FILED: December 26, 1995 (19951226)

OBJECT-ORIENTED LANGUAGE PROCESSING METHOD AND PROCESSOR

APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
 ...

ABSTRACT

PROBLEM TO BE SOLVED: To make an execution **code** size small by converting dynamic object generation to static object generation and executing object generation...

...SOLUTION: An application source **code** read part 21 reads a dynamic application source **code**. When analysis is ended and the application source **code** reaches a terminal, a class generation part 200 newly generates class definition based on the...

... table 31, a data table 32 and a method table 33. Then, an application source **code** conversion part 201 converts the dynamic application source **code** to a static application source **code** based on the information of the class table 31, the data table 32 and the...

5/3,K/6 (Item 6 from file: 347)

DIALOG(R)File 347:JAPIO
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05531966 **Image available**

METHOD FOR CHANGING CLASS STRUCTURE

PUB. NO.: 09-146766 [JP 9146766 A]
 PUBLISHED: June 06, 1997 (19970606)
 INVENTOR(s): UEDA RYOICHI
 TSUKUDA GUNJI
 DANNO HIROBUMI
 APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
 JP (Japan)
 APPL. NO.: 07-323911 [JP 95323911]
 FILED: November 17, 1995 (19951117)
 APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
 ...

ABSTRACT

... work for moving a method of using only common attribute by the use of class **code** analytical information to an upper class at the time of changing the structure of an...

...SOLUTION: Class specification analytical information (C) is prepared (201) from a source **code** of **object**-**oriented** language, common attribute information inputted by a user is acquired (202) and a new upper ...

... The common attributes of a lower class (E) to be changed are integrated (204), method **code** analytical information is prepared (205) from the method **code** included in the information C and a method in which a set of use attributes...

... set of used attributes is equal to a set of used methods is detected (207), **codes** relating to the method concerned are deleted, a main method name is substituted for the...

...208) the information C, and then the information C is outputted (209) by a source **code**.

5/3,K/7 (Item 7 from file: 347)

DIALOG(R)File 347:JAPIO
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05499853 **Image available**
 DEVICE FOR AUTOMATICALLY GENERATING SOURCE **CODE** RELATED TO RECORD
 DEFINITION

PUB. NO.: 09-114653 [JP 9114653 A]
 PUBLISHED: May 02, 1997 (19970502)
 INVENTOR(s): UCHIDA MASAKO
 APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
 JP (Japan)
 APPL. NO.: 07-266794 [JP 95266794]
 FILED: October 16, 1995 (19951016)

DEVICE FOR AUTOMATICALLY GENERATING SOURCE **CODE** RELATED TO RECORD
 DEFINITION

APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
 ...

ABSTRACT

PROBLEM TO BE SOLVED: To remove restrictions on source **code** reuse to realize capsuling in an **object** **oriented** program by specifying an

algorithm in a record definition related source ****code**** automatic generator...

... operation redefinition file is set to generate a file operation redefinition method. The generated source ****code**** is expanded in a generation position 016 (a class object definition part or an object...

5/3,K/8 (Item 8 from file: 347)

DIALOG(R)File 347:JAPIO

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05466575 ****Image available****

C++ PROGRAMMING SUPPORT DEVICE

PUB. NO.: 09-081375 [JP 9081375 A]

PUBLISHED: March 28, 1997 (19970328)

INVENTOR(s): JINBO ATSUSHI

SUEYASU SHIGEMITSU

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation),
JP (Japan)

APPL. NO.: 07-241319 [JP 95241319]

FILED: September 20, 1995 (19950920)

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation

...

ABSTRACT

... To ensure the satisfactory utilization of features of a C++ language access designator in an ****object****-****oriented**** downstream designing-mounting state and to automate the declaration of a friend function...

... functions corresponding to an event to the class declaration part of a C++ language source ****code****, and a class declaration part correction means 4 which merges the source ****code**** information received from the means 3 with the source file that is selected out of a C++ source ****code**** file 6 via the operation of the operator.

5/3,K/9 (Item 9 from file: 347)

DIALOG(R)File 347:JAPIO

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05359223 ****Image available****

OBJECT RELATIVE INFORMATION MANAGEMENT SYSTEM

PUB. NO.: 08-314723 [JP 8314723 A]

PUBLISHED: November 29, 1996 (19961129)

INVENTOR(s): MATSUSHITA YUKITSUGU

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation),
JP (Japan)

APPL. NO.: 07-119537 [JP 95119537]

FILED: May 18, 1995 (19950518)

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation

...

ABSTRACT

... by adding a function to analyze the inter-object relation based on the application source ****code**** developed in an ****object****- ****oriented**** programming language and to manage the inter-instance relative information
...

...CONSTITUTION: An inter-object relative information management system of an ****object**--**oriented**** program comprises a program execution controller 101, an execution state storage 102, an input/output...

5/3,K/10 (Item 10 from file: 347)

DIALOG(R)File 347:JAPIO

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05359211 ****Image available****

CLASS LIBRARY PREPARATION METHOD IN ****OBJECT**--**ORIENTED**** COBOL LANGUAGE

PUB. NO.: 08-314711 [JP 8314711 A]

PUBLISHED: November 29, 1996 (19961129)

INVENTOR(s): KOBAYASHI MASAKI
SAKURAZAWA ASAMI
NAMIKI KANENOSUKE

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation),
JP (Japan)

APPL. NO.: 07-122158 [JP 95122158]

FILED: May 22, 1995 (19950522)

CLASS LIBRARY PREPARATION METHOD IN ****OBJECT**--**ORIENTED**** COBOL LANGUAGE

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation
...

ABSTRACT

PURPOSE: To reduce the preparation manhour of a class library by adding a source ****code**** analysis function and a class library preparing function to a class library extraction means...

... every data item and an extraction information file 104. The means 105 includes a source ****code**** analysis function 106, an editing retrieval function 107 and a class library preparing function 108...

... program written in a COBOL language and can prepare a class library 109 of an ****object**--**oriented**** COBOL language. Thus, the library 109 can be prepared from the source program of the...

5/3,K/11 (Item 11 from file: 347)

DIALOG(R)File 347:JAPIO

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04594661 ****Image available****

METHOD AND SYSTEM FOR INSPECTING TYPE OF PROGRAM

PUB. NO.: 06-266561 [JP 6266561 A]

PUBLISHED: September 22, 1994 (19940922)

INVENTOR(s): ASAMI MASATO
YAMAMOTO YOICHI
NAMIOKA MIYOKO

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation),
JP (Japan)

APPL. NO.: 05-051045 [JP 9351045]

FILED: March 11, 1993 (19930311)

JOURNAL: Section: P, Section No. 1847, Vol. 18, No. 676, Pg. 43,
December 20, 1994 (19941220)

APPLICANT(s): ****HITACHI**** LTD [000510] (A Japanese Company or Corporation
...

ABSTRACT

PURPOSE: To provide a method for efficiently inspecting a type in a strongly-typed ****object****-****oriented**** programming language...

... compiled by a compiler 100 inside a computer system 10, an object 131, an execution ****code**** 133 and a type inspection program 135 are generated and the object 131, on program...

5/3,K/12 (Item 1 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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012740197 ****Image available****

WPI Acc No: 99-546314/199946

XRPX Acc No: N99-405476

****Code** generating apparatus - has ****code**** generator which produces ****code**** based on program information generated by ****object****-****oriented**** function exclusion unit which eliminates unnecessary function among ****object****-****oriented**** functions**

Patent Assignee: ****HITACHI**** LTD (HITA

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 11237980	A	19990831	JP 9838329	A	19980220	G06F-009/06	199946 B

Priority Applications (No Type Date): JP 9838329 A 19980220

Language, Pages: JP 11237980 (11)

****Code** generating apparatus...**

...has **code**** generator which produces ****code**** based on program information generated by ****object****-****oriented**** function exclusion unit which eliminates unnecessary function among ****object****-****oriented**** functions**

Patent Assignee: ****HITACHI**** LTD...

...Abstract (Basic): NOVELTY - A ****code**** generator (108) produces a ****code**** based on program information generated by an ****object****-****oriented**** function exclusion unit (107). The ****object****-****oriented**** function exclusion unit eliminates unnecessary function among ****object****-****oriented**** functions according to a function exclusion rule. DETAILED DESCRIPTION - The ****code**** generating apparatus, which generates ****code**** from ****object****-****oriented**** specifications, has a specification analyzer (106) that analyzes the specifications based on the ****object****-****oriented**** input and extracts the specification information. An INDEPENDENT CLAIM is included for an ****object****-****oriented**** optimization ****code**** generation method...

...ADVANTAGE - Reduces required memory capacity since unnecessary function of ****object****-****oriented**** programming language is eliminated when generating ****code**** from ****object****-****oriented**** document. DESCRIPTION OF DRAWING(S) - The figure is a diagram showing the entire components of the ****code**** generating apparatus. (106) Specification analyzer; (107) ****Object****-****oriented**** function exclusion unit; (108) ****Code**** generator...

Title Terms: ****CODE****;

right on

5/3,K/13 (Item 2 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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012389050 ****Image available****
 WPI Acc No: 99-195157/199917
 XRPX Acc No: N99-143427

Automatic source **code generation for batch processing type business application - involves setting type definition corresponding to input specification and using object definition to generate source **code** for customized application**

Patent Assignee: ****HITACHI** JOHO SYSTEMS KK (**HITA-N)****
 Number of Countries: 001 Number of Patents: 001
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 11039148	A	19990212	JP 97198485	A	19970724	G06F-009/06	199917 B

Priority Applications (No Type Date): JP 97198485 A 19970724
 Language, Pages: JP 11039148 (13)

Automatic source **code generation for batch processing type business use application...**

...involves setting type definition corresponding to input specification and using object definition to generate source **code for customized application**

Patent Assignee: ****HITACHI** JOHO SYSTEMS KK...**

...HITA-N)****

...Abstract (Basic): to input specification are set and using a database containing various object definition, a source ****code**** is generated implementing ****object** **oriented**** and structured programming techniques. The source ****code**** thus generated supports customization of information processing...

...ADVANTAGE - Supports both **object **oriented** and structured programming techniques...**

...Title Terms: **CODE;**

5/3,K/14 (Item 3 from file: 351)
 DIALOG(R)File 351:DERWENT WPI
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012109819 ****Image available****
 WPI Acc No: 98-526731/199845
 XRPX Acc No: N98-411765

Class modification support method for **object **oriented** software development - involves adding section coding information which shows name of section **code**, value and meaning of higher order class name and lower order class name to section coding table**

Patent Assignee: ****HITACHI** LTD (HITA**
 Number of Countries: 001 Number of Patents: 001
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 10232769	A	19980902	JP 9734628	A	19970219	G06F-009/06	199845 B

Priority Applications (No Type Date): JP 9734628 A 19970219
 Language, Pages: JP 10232769 (9)

Class modification support method for **object **orient d** software development...**

...involves adding section coding information which shows name of section **code, value and meaning of higher order class name and lower order**

*too new
but good*

class name to section...Patent Assignee: ****HITACHI** LTD...**

...Abstract (Basic): Attributes such as section ****code**** and description, which shows role of lower order class, in the higher order class, is defined. Then, the section coding information which shows the name of a section ****code**** value and meaning of higher order class name and new lower order class name is...

(...Title Terms: ****CODE****;

5/3,K/15 (Item 4 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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011819169 ****Image available****

WPI Acc No: 98-236079/199821

XRPX Acc No: N98-187192

****Object** **oriented** distributed system with network independence - selects object corresponding to requested message from computer, based on which procedure of selected object is utilized by requesting computer**

Patent Assignee: ****HITACHI** LTD (HITA**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 10074146	A	19980317	JP 96229705	A	19960830	G06F-009/44	199821 B

Priority Applications (No Type Date): JP 96229705 A 19960830

Language, Pages: JP 10074146 (12)

****Object** **oriented** distributed system with network independence...**Patent Assignee: ****HITACHI** LTD...**

...Abstract (Basic): computers, by an autonomous dispersion communication processor (1ad,2ad). The relationship between the message identification ****code**** and the procedure of the object is stored in a memory...

5/3,K/16 (Item 5 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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011570661 ****Image available****

WPI Acc No: 97-547142/199750

XRPX Acc No: N97-456026

Program **code generation method - involves generating program **code** by analysing data item name and service management class**

Patent Assignee: ****HITACHI** LTD (HITA**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 9265390	A	19971007	JP 9674551	A	19960328	G06F-009/06	199750 B

Priority Applications (No Type Date): JP 9674551 A 19960328

Language, Pages: JP 9265390 (10)

Program **code generation method...**

...involves generating program ****code**** by analysing data item name and service management class

Patent Assignee: ****HITACHI** LTD...**

...Abstract (Basic): class type and the data item, the object assembly is controlled by forming the program ****code**** for the service object class ...

...ADVANTAGE - Improves ****code**** generation efficiency. Improves program development by ****object**** ****oriented**** analysis...

...Title Terms: ****CODE****;

5/3,K/17 (Item 6 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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011467565 ****Image available****

WPI Acc No: 97-445472/199741

XRPX Acc No: N97-371093

Renewal method of **object**** ****oriented**** database management system - involves establishing by-pass link information in slot of one or more intermediate objects which are inserted between attribute value storing object and determined nearest object**

Patent Assignee: ****HITACHI**** LTD (HITA

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat	No Kind	Date	Main IPC	Week
JP 9204334	A	19970805	JP 9634363	A	19960129	G06F-012/00	199741 B

Priority Applications (No Type Date): JP 9634363 A 19960129

Language, Pages: JP 9204334 (11)

Renewal method of **object**** ****oriented**** database management system...**

Patent Assignee: ****HITACHI**** LTD...

...Abstract (Basic): an object having a number of slots with name. A preknown value or an identification ****code**** is stored in the slot name. A link information of self object with other objects...

5/3,K/18 (Item 7 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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011462194 ****Image available****

WPI Acc No: 97-440101/199741

XRPX Acc No: N97-366008

Source **code**** formation method with eliminated ****code**** segment restoration facility for ****object**** ****oriented**** analysis and design support system - involves removing comment symbols demarcating specific ****code**** segment, initially ordained to be ignored, when its execution is required**

Patent Assignee: ****HITACHI**** LTD (HITA

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat	No Kind	Date	Main IPC	Week
JP 9198241	A	19970731	JP 967138	A	19960119	G06F-009/06	199741 B

Priority Applications (No Type Date): JP 967138 A 19960119

Language, Pages: JP 9198241 (7)

Source **code**** formation method with eliminated ****code**** segment restoration facility for ****object**** ****oriented**** analysis and design support system...**

...involves removing comment symbols demarcating specific ****code**** segment, initially ordained to be ignored, when its execution is required

Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): The method involves storing the **code** segment that is marked as a comment entry, so as to be ignored during program...

...When this **code** segment is required to be executed, the comment symbols are removed and the **code** segment is restored for execution

(...Title Terms: **CODE**;

(5/3,K/19 (Item 8 from file: 351)
DIALOG(R)File 351:DERWENT WPI
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011429531 **Image available**
WPI Acc No: 97-407438/199738
XRPX Acc No: N97-338860

Translator for **object **oriented** language processor for engine control system of motor vehicle - in which processing of solid state memory is carried out based on static object formation**

Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 9179738	A	19970711	JP 95338572	A	19951226		199738 B

Priority Applications (No Type Date): JP 95338572 A 19951226
Language, Pages: JP 9179738 (17)

Translator for **object **oriented** language processor for engine control system of motor vehicle...**

Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): The translator (20) has a reader (21) which reads the application source **code** related to dynamic object formation. An analyzer (22) analyzes the read application source **code** and extracts the instance contained in the application source **codes**. A set of registration units (23-25) carries out registration administration of the extracted instance...

...A pair of **code** converters (200,201) convert the dynamic applications of **code** to a static application source **code** based on the instance information. Then, dynamic object formation of the object is transformed to a static object formation based on static application source **code**. A solid state memory is processed based on static object formation...

(...ADVANTAGE - Enables optimization of execution **code** size...

(5/3,K/20 (Item 9 from file: 351)
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011377259 **Image available**
WPI Acc No: 97-355166/199733
XRPX Acc No: N97-294501

Class configuration alteration method for software development supporting system - involves outputting altered analysis information as source **code by correcting class specification analysis information**

Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 9146766	A	19970606	JP 95323911	A	19951117		199733 B

Priority Applications (No Type Date): JP 95323911 A 19951117
 Language, Pages: JP 9146766 (22)

... involves outputting altered analysis information as source **code**** by correcting class specification analysis information**

Patent Assignee: ****HITACHI** LTD...**

...Abstract (Basic): a higher order class name, attribute name, die of an attribute, method name and method ****code**** from the source ****code**** described in an ****object**** ****oriented**** language and producing a class specification analysis information. A new higher-order class consisting of...

...referring to each operation procedure and a set of methods are extracted, and a method ****code**** analysis information is formed based on the method ****code****.

...

...processing co-ordinates is detected using the use attribute ensemble and use method ensemble. The ****code**** relating to the detected method is deleted. The class specification analysis information is also corrected...

...method term of main method. The altered class specification analysis information is output as source ****code****.

...Title Terms: ****CODE****;

5/3,K/21 (Item 10 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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011325250 ****Image available****

WPI Acc No: 97-303154/199728

XRPX Acc No: N97-250735

Automatic recording format related source **code**** generation appts for ****object**** ****oriented**** software development system - processes source ****code**** of every class obtained from input class definition file, which is expanded to form new class definition file**

Patent Assignee: ****HITACHI** LTD (HITA**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 9114653	A	19970502	JP 95266794	A	19951016	G06F-009/06	199728 B

Priority Applications (No Type Date): JP 95266794 A 19951016
 Language, Pages: JP 9114653 (11)

Automatic recording format related source **code**** generation appts for ****object**** ****oriented**** software development system...**

...processes source **code**** of every class obtained from input class definition file, which is expanded to form n w...**

Patent Assignee: ****HITACHI** LTD...**

...Abstract (Basic): 17) are obtained. The input information is decoded for every class and accordingly the source ****code**** for record definition in each class is produced...

...The developed source ****code**** is processed for every class definition file and a new class definition file (0B) is...

(...ADVANTAGE - Realizes object orientation and redefinition of record format. Enables reusing of source ****code**** of file record definition...
 Title Terms: ****CODE****;

(5/3,K/22 (Item 11 from file: 351)
 DIALOG(R)File 351:DERWENT WPI
 (c) 1999 DERWENT INFO LTD. All rts. reserv.

011260920 **Image available**
 WPI Acc No: 97-238823/199722
 XRPX Acc No: N97-197296

New computer program preparation by combining program modules - by automatically extracting dependence relation of component with another component by computer from interface definition within class definition

Patent Assignee: ****HITACHI** LTD (HITA**
 Inventor: KOZUKA K; OKODA T; SAKAMOTO K; SEKI T; YAMADA E; OHKODA T
 Number of Countries: 003 Number of Patents: 003
 Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
GB 2307070	A	19970514	GB 9623171	A	19961106	G06F-009/44	199722	B
JP 9134282	A	19970520	JP 95289761	A	19951108	G06F-009/06	199730	
US 5845119	A	19981201	US 96744457	A	19961107	G06F-009/45	199904	

Priority Applications (No Type Date): JP 95289761 A 19951108
 Language, Pages: GB 2307070 (43); JP 9134282 (12)

Patent Assignee: ****HITACHI** LTD...**

(...Abstract (Basic): The method involves automatically extracting by a computer a class definition expressing a component in ****object**** ****oriented**** language, from a source ****code**** of an already existing program from source ****code**** file (11). A dependence relation of the component with another component is automatically extracted by...

(5/3,K/23 (Item 12 from file: 351)
 DIALOG(R)File 351:DERWENT WPI
 (c) 1999 DERWENT INFO LTD. All rts. reserv.

011145546 **Image available**
 WPI Acc No: 97-123470/199712
 XRPX Acc No: N97-101759

Program formation method for **object **oriented** language system - involves forming inspection **code** which examines value of each attribute data item that corresponds to reference class outside data item name**

Patent Assignee: ****HITACHI** LTD (HITA**
 Number of Countries: 001 Number of Patents: 001
 Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
JP 9006601	A	19970110	JP 95157943	A	19950623	G06F-009/06	199712	B

Priority Applications (No Type Date): JP 95157943 A 19950623
 Language, Pages: JP 9006601 (30)

Program formation method for **object **oriented** language system...**

...involves forming inspection **code which examines value of each**

attribute data item that corresponds to reference class outside data...
 Patent Assignee: ****HITACHI** LTD...**

...Abstract (Basic): The program formation method involves forming a program of an ****object** **oriented**** language based on class specification. A class name type and an attribute data item are...

...A class definition ****code**** which indicates the type of the class name and the attribute data item is formed...

...based on the attribute data item name and the reference data item name. An inspection ****code**** which examines the value of each attribute data item, is formed...

...Title Terms: ****CODE****;

5/3,K/24 (Item 13 from file: 351)

DIALOG(R)File 351:DERWENT WPI

(c) 1999 DERWENT INFO LTD. All rts. reserv.

011091573 ****Image available****

WPI Acc No: 97-069498/199707

XRPX Acc No: N97-057300

Class library prodn. method of **object-**oriented** common business oriented language - by respectively producing class which control data item class produced per data item**

Patent Assignee: ****HITACHI** LTD (HITA**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
JP 8314711	A	19961129	JP 95122158	A	19950522	G06F-009/06	199707	B

Priority Applications (No Type Date): JP 95122158 A 19950522

Language, Pages: JP 8314711 (10)

Class library prodn. method of **object-**oriented** common business oriented language...**

Patent Assignee: ****HITACHI** LTD...**

...Abstract (Basic): analysing an existing program counter of a common business oriented language and analysing a source ****code**** for processing...

...ADVANTAGE - Reduces manhour in reconstruction of ****object**-**oriented**** system design and structural design. Increases efficiency of class library prodn. process that employs software...

5/3,K/25 (Item 14 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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009879578 ****Image available****

WPI Acc No: 94-159492/199419

XRPX Acc No: N94-125395

Class hierarchical relationship determination method for **object **oriented** language - affixing **codes** each having predetermined relation to each class in hierarchy and deciding relationship of inheritance in hierarchy of two optional class s with series of **codes** affixed to two optional classes having hierarchical r lationship**

Patent Assignee: ****HITACHI** LTD (HITA); **HITACHI** SEIBU SOFTWARE CO LTD (**HITA-N)****

Inventor: TOMITA H; YOSHIMURA K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
US 5313633	A	19940517	US 90529955	A	19900529	G06F-009/40	199419 B

Priority Applications (No Type Date): JP 89135862 A 19890531

Language, Pages: US 5313633 (36)

Class hierarchical relationship determination method for **object******

****oriented** language...**

...affixing **codes**** each having predetermined relation to each class in hierarchy and deciding relationship of inheritance in hierarchy of two optional classes with series of ****codes**** affixed to two optional classes having hierarchical relationship**

Patent Assignee: ****HITACHI** LTD...**

...HITACHI SEIBU SOFTWARE CO LTD...**

...HITA-N)**

...Abstract (Basic): The computer implemented process of operating an **object**** ****oriented**** language having a number of classes in a class hierarchical relationship in a single inheritance and using a message passing to activate a method, involves affixing ****codes**** to each of the number of classes, each having a predetermined relationship to each other...**

...relationship between the number of classes is decided, by identifying the predetermined relationship between the **codes**** affixed to the classes having the class hierarchical relationship...**

...The affixing occurs prior to the deciding and involves using numerical characters as the affixed **codes****. The numerical characters, with a specific class as a reference and comprising the ****codes**** of classes in a sub hierarchy, are numerical values that increase consecutively from a first...**

...USE/ADVANTAGE - Deciding class hierarchical relationship of **object**** ****oriented**** language in which high speed execution is aimed at by compiling...**

...Title Terms: **CODE****;**

show files;ds;t 6/3/all;t 7/3/all;t 10/3,k/all
 File 344:Chinese Patents ABS Apr 1985-1999/Dec
 (c) 1999 European Patent Office
 File 347:JAPIO OCT 1976-1999/SEP(UPDATED 991229)
 (c) 1999 JPO & JAPIO
 File 351:DERWENT WPI 1963-1999/UD=, UM=, & UP=199954
 (c) 1999 DERWENT INFO LTD
 File 371:FRENCH PATENTS 1961-1999/BOPI 9952
 (c) 2000 INPI. ALL RTS. RESERV.

Set	Items	Description
S1	650125	PA="HITACHI"
S2	17555	PA=HITA-N
S3	92	(S1 OR S2) AND OBJECT()ORIENTED
S4	25	S3 AND CODE?
S5	25	S4 NOT AD>990222
S6	13	AU="NARISAWA F":AU="NARISAWA FUMIO"
S7	2	AU="NAYA H"
S8	415	AU="YOKOYAMA T" OR AU="YOKOYAMA TAKANORI"
S9	58	AU="OHKAWA K"
S10	5	(S8 OR S9) AND OBJECT(2N)ORIENT?

6/3/1 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

06296388 **Image available**
 DEVICE AND METHOD FOR GENERATING OBJECT-ORIENTATED OPTIMIZED CODE

PUB. NO.: 11-237980 [JP 11237980 A]
 PUBLISHED: August 31, 1999 (19990831)
 INVENTOR(s): **NARISAWA FUMIO**
 NAYA EIKO
 YOKOYAMA TAKANORI
 OKAWA KEIICHIROU
 APPLICANT(s): HITACHI LTD
 APPL. NO.: 10-038329 [JP 9838329]
 FILED: February 20, 1998 (19980220)

6/3/2 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

05897880 **Image available**
 DEVICE FOR DETECTING OUTER PERIPHERAL SHAPE OF OBJECT

PUB. NO.: 10-180980 [JP 10180980 A]
 PUBLISHED: July 07, 1998 (19980707)
 INVENTOR(s): **NARISAWA FUMIO**
 APPLICANT(s): SODA TEKKO KK [000000] (A Japanese Company or Corporation),
 JP (Japan)
 ASTECS KK [000000] (A Japanese Company or Corporation), JP
 (Japan)
 APPL. NO.: 10-025217 [JP 9825217]
 FILED: January 23, 1998 (19980123)

6/3/3 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

05357845 **Image available**

SPECTROMETER

PUB. NO.: 08-313345 [JP 8313345 A]
 PUBLISHED: November 29, 1996 (19961129)
 INVENTOR(s): SATO ISAO
 MIZUNO ATSUSHI
 NARISAWA FUMIO
 HARANO MASAYUKI
 APPLICANT(s): HIOKI EE CORP [399815] (A Japanese Company or Corporation),
 JP (Japan)
 (APPL. NO.: 07-142704 [JP 95142704]
 FILED: May 17, 1995 (19950517)

6/3/4 (Item 4 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

05348676 **Image available**
 SPECTROMETER

PUB. NO.: 08-304176 [JP 8304176 A]
 PUBLISHED: November 22, 1996 (19961122)
 INVENTOR(s): MIZUNO ATSUSHI
 HARANO MASAYUKI
 NARISAWA FUMIO
 SEKI KAZUHIRO
 APPLICANT(s): HIOKI EE CORP [399815] (A Japanese Company or Corporation),
 JP (Japan)
 APPL. NO.: 07-129332 [JP 95129332]
 FILED: April 28, 1995 (19950428)

6/3/5 (Item 5 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

05292347 **Image available**
 SPECTROPHOTOMETER

PUB. NO.: 08-247847 [JP 8247847 A]
 PUBLISHED: September 27, 1996 (19960927)
 INVENTOR(s): **NARISAWA FUMIO**
 MIZUNO ATSUSHI
 SEKI KAZUHIRO
 APPLICANT(s): HIOKI EE CORP [399815] (A Japanese Company or Corporation),
 JP (Japan)
 (APPL. NO.: 07-081865 [JP 9581865]
 FILED: March 14, 1995 (19950314)

6/3/6 (Item 6 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

05292345 **Image available**
 SPECTROPHOTOMETER

PUB. NO.: 08-247845 [JP 8247845 A]
 PUBLISHED: September 27, 1996 (19960927)
 INVENTOR(s): **NARISAWA FUMIO**
 MIZUNO ATSUSHI
 SEKI KAZUHIRO

APPLICANT(s): HIOKI EE CORP [399815] (A Japanese Company or Corporation),
 JP (Japan)
 APPL. NO.: 07-081864 [JP 9581864]
 FILED: March 14, 1995 (19950314)

6/3/7 (Item 7 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

05227660 **Image available**
 DETECTOR FOR MATERIAL TO BE PRINTED FOR SCREEN PRINTING MACHINE

PUB. NO.: 08-183160 [JP 8183160 A]
 PUBLISHED: July 16, 1996 (19960716)
 INVENTOR(s): **NARISAWA FUMIO**
 APPLICANT(s): TOYO CORP KK [000000] (A Japanese Company or Corporation), JP
 (Japan)
 APPL. NO.: 06-337669 [JP 94337669]
 FILED: December 28, 1994 (19941228)

6/3/8 (Item 8 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

04707010 **Image available**
 SPECTROPHOTOMETER

PUB. NO.: 07-027610 [JP 7027610 A]
 PUBLISHED: January 31, 1995 (19950131)
 INVENTOR(s): TANAKA KOKI
 NARISAWA FUMIO
 APPLICANT(s): HIOKI EE CORP [399815] (A Japanese Company or Corporation),
 JP (Japan)
 APPL. NO.: 05-195349 [JP 93195349]
 FILED: July 13, 1993 (19930713)

6/3/9 (Item 9 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

01134984 **Image available**
 SWITCHING DEVICE FOR CURRENT/SPEED CONTROL

PUB. NO.: 58-072384 [JP 58072384 A]
 PUBLISHED: April 30, 1983 (19830430)
 INVENTOR(s): **NARISAWA FUMIO**
 APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
 (Japan)
 APPL. NO.: 56-171782 [JP 81171782]
 FILED: October 27, 1981 (19811027)
 JOURNAL: Section: E, Section No. 188, Vol. 07, No. 166, Pg. 46, July
 21, 1983 (19830721)

6/3/10 (Item 10 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

01115922 **Image available**
 SPEED CONTROLLING DEVICE OF MOTOR USED FOR OILER

PUB. NO.: 58-053322 [JP 58053322 A]
 PUBLISHED: March 29, 1983 (19830329)
 INVENTOR(s): **NARISAWA FUMIO**
 APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
 (Japan)
 APPL. NO.: 56-151377 [JP 81151377]
 FILED: September 26, 1981 (19810926)
 JOURNAL: Section: M, Section No. 222, Vol. 07, No. 137, Pg. 166, June
 15, 1983 (19830615)

6/3/11 (Item 11 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

00813697 **Image available**
 CURRENT LIMITING DEVICE FOR MOTOR

PUB. NO.: 56-133997 [JP 56133997 A]
 PUBLISHED: October 20, 1981 (19811020)
 INVENTOR(s): **NARISAWA FUMIO**
 APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
 (Japan)
 APPL. NO.: 55-036980 [JP 8036980]
 FILED: March 25, 1980 (19800325)
 JOURNAL: Section: E, Section No. 91, Vol. 06, No. 12, Pg. 64, January
 23, 1982 (19820123)

6/3/12 (Item 12 from file: 347)

DIALOG(R)File 347:JAPIO
 (c) 1999 JPO & JAPIO. All rts. reserv.

00563310 **Image available**
 TENSION CONTROLLER FOR ROLLING MILL

PUB. NO.: 55-050910 [JP 55050910 A]
 PUBLISHED: April 14, 1980 (19800414)
 INVENTOR(s): MINEURA TOSHIMI
 NARISAWA FUMIO
 APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
 (Japan)
 APPL. NO.: 53-124570 [JP 78124570]
 FILED: October 12, 1978 (19781012)
 JOURNAL: Section: M, Section No. 18, Vol. 04, No. 92, Pg. 151, July
 03, 1980 (19800703)

6/3/13 (Item 1 from file: 351)

DIALOG(R)File 351:DERWENT WPI
 (c) 1999 DERWENT INFO LTD. All rts. reserv.

012531405 **Image available**
 WPI Acc No: 99-337511/199928
 XRPX Acc No: N99-252936

Vehicle control apparatus for user controllable environment and theft protection

Patent Assignee: HITACHI LTD (HITA)
 Inventor: **NARISAWA F**; NAYA H; OHKAWA K; YOKOYAMA T
 Number of Countries: 021 Number of Patents: 001
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
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WO 9923539 A1 19990514 WO 97JP3988 A 19971031 G05B-019/04 199928 B

Priority Applications (No Type Date): WO 97JP3988 A 19971031

Filing Details:

Patent Kind Filing Notes Application Patent

WO 9923539 A1

Designated States (National): CN JP KR US

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC

NL PT SE

Language, Pages: WO 9923539 (J, 59)

7/3/1 (Item 1 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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012531405 **Image available**

WPI Acc No: 99-337511/199928

XRPX Acc No: N99-252936

Vehicle control apparatus for user controllable environment and theft protection

Patent Assignee: HITACHI LTD (HITA)

Inventor: NARISAWA F; **NAYA H**; OHKAWA K; YOKOYAMA T

Number of Countries: 021 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
WO 9923539	A1	19990514	WO 97JP3988	A	19971031	G05B-019/04	199928	B

Priority Applications (No Type Date): WO 97JP3988 A 19971031

Filing Details:

Patent Kind Filing Notes Application Patent

WO 9923539 A1

Designated States (National): CN JP KR US

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC

NL PT SE

Language, Pages: WO 9923539 (J, 59)

7/3/2 (Item 2 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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011764515 **Image available**

WPI Acc No: 98-181425/199817

XRPX Acc No: N98-143610

Navigation system with information processing unit and mounted display - mounted on moving body for displaying traffic information such as map information and position information of moving body on display, system stores application program for processing traffic information which is partially exchanged

Patent Assignee: HITACHI LTD (HITA)

Inventor: FUKUNAGA Y; NAKAMURA K; **NAYA H**

Number of Countries: 019 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
EP 833289	A1	19980401	EP 97115932	A	19970912	G08G-001/0968	199817	B
JP 10103970	A	19980424	JP 96254678	A	19960926	G01C-021/00	199827	

Priority Applications (No Type Date): JP 96254678 A 19960926

Filing Details:

Patent Kind Filing Notes Application Patent

EP 833289 A1

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE

Language, Pages: EP 833289 (E, 22); JP 10103970 (12)

10/3,K/1 (Item 1 from fil : 347)

DIALOG(R)File 347:JAPIO

(c) 1999 JPO & JAPIO. All rts. reserv.

06296388 **Image available**

DEVICE AND METHOD FOR GENERATING **OBJECT**--**ORIENTATED** OPTIMIZED CODE

PUB. NO.: 11-237980 [JP 11237980 A]

PUBLISHED: August 31, 1999 (19990831)

INVENTOR(s): NARISAWA FUMIO

NAYA EIKO

YOKOYAMA TAKANORI

OOKAWA KEIICHIROU

APPLICANT(s): HITACHI LTD

APPL. NO.: 10-038329 [JP 9838329]

FILED: February 20, 1998 (19980220)

DEVICE AND METHOD FOR GENERATING **OBJECT**--**ORIENTATED** OPTIMIZED CODE

INVENTOR(s): NARISAWA FUMIO

NAYA EIKO

YOKOYAMA TAKANORI

OOKAWA KEIICHIROU

ABSTRACT

...activates a specification analysis part 106 and performs phrase analysis or grammar analysis. Next, an **object**--**oriented** function excluding part 107 is activated and based on function selection items, stored in the ...

... by the specification analytic part 106 and on the output code pattern determined by the **object**--**oriented** function excluding part 107, code generation is performed.

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10/3,K/2 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

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05630204 **Image available**

OBJECT--**ORIENTED** DISTRIBUTED PROCESSOR

PUB. NO.: 09-245004 [JP 9245004 A]

PUBLISHED: September 19, 1997 (19970919)

INVENTOR(s): **YOKOYAMA TAKANORI**

IKEDA KOJI

OTSUJI SHINYA

SUZUKI SHOJI

KOBAYASHI NOBUHISA

APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 08-049196 [JP 9649196]

FILED: March 06, 1996 (19960306)

OBJECT--**ORIENTED** DISTRIBUTED PROCESSOR

INVENTOR(s): **YOKOYAMA TAKANORI**

IKEDA KOJI

OTSUJI SHINYA

SUZUKI SHOJI
KOBAYASHI NOBUHISA

10/3,K/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05466583 **Image available**
OBJECT--**ORIENTED** COMPUTER SYSTEM AND COMPILER FOR **OBJECT**--
ORIENTED PROGRAM

PUB. NO.: 09-081383 [JP 9081383 A]
PUBLISHED: March 28, 1997 (19970328)
INVENTOR(s): **YOKOYAMA TAKANORI**
NAYA EIKO
HIROTA ATSUHIKO
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 07-235162 [JP 95235162]
FILED: September 13, 1995 (19950913)

OBJECT--**ORIENTED** COMPUTER SYSTEM AND COMPILER FOR **OBJECT**--
ORIENTED PROGRAM

INVENTOR(s): **YOKOYAMA TAKANORI**
NAYA EIKO
HIROTA ATSUHIKO

ABSTRACT

PROBLEM TO BE SOLVED: To provide the **object**--**oriented** computer system and a development tool which enable processes to efficiently share objects...

10/3,K/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05317315 **Image available**
OBJECT--**ORIENTED** DATA BASE SYSTEM AND PROCESSING METHOD THEREFOR

PUB. NO.: 08-272815 [JP 8272815 A]
PUBLISHED: October 18, 1996 (19961018)
INVENTOR(s): **YOKOYAMA TAKANORI**
NAYA EIKO
SAITO MASAHIKO
HIROTA ATSUHIKO
TSUNETOMI KUNIIHIKO
KAMIWAKI TADASHI
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 07-077595 [JP 9577595]
FILED: April 03, 1995 (19950403)

OBJECT--**ORIENTED** DATA BASE SYSTEM AND PROCESSING METHOD THEREFOR

INVENTOR(s): **YOKOYAMA TAKANORI**
NAYA EIKO
SAITO MASAHIKO
HIROTA ATSUHIKO
TSUNETOMI KUNIIHIKO
KAMIWAKI TADASHI

10/3,K/5 (Item 5 from file: 347)
DIALOG(R)File 347:JAPIO
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05074955 **Image available**
OBJECT-**ORIENTED** INFORMATION PROCESSING SYSTEM

PUB. NO.: 08-030455 [JP 8030455 A]
PUBLISHED: February 02, 1996 (19960202)
INVENTOR(s): **YOKOYAMA TAKANORI**
SHIMADA MASARU
SAITO MASAHIKO
TSUNETOMI KUNIHICO
NAKAMURA TOMOAKI
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 06-164996 [JP 94164996]
FILED: July 18, 1994 (19940718)

OBJECT-**ORIENTED** INFORMATION PROCESSING SYSTEM

INVENTOR(s): **YOKOYAMA TAKANORI**
SHIMADA MASARU
SAITO MASAHIKO
TSUNETOMI KUNIHICO
NAKAMURA TOMOAKI

show files;ds;t 3/,k/all
 File 348:EUROPEAN PATENTS 1978-1999/DEC W51
 (c) 1999 EUROPEAN PATENT OFFICE

Set	Items	Description
S1	7324	PA="HITACHI"
S2	21	S1 AND OBJECT(2N)ORIENT?
S3	9	S2 AND CODE?

3/K/1

DIALOG(R)File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
 PATENT ASSIGNEE:
 Hitachi, Ltd...

...SPECIFICATION is a conceptual view for illustrating storing or packaging of network setup information in an **object-oriented** database in the network management system according to the invention;

Fig. 11 is a view...be made of the concept of storing or packaging to network setup information in the **object-oriented** database in the network management system according to the instant embodiment of the invention.

Individual...be made of a registration method which allows the network setup information packaged in the **object-oriented** database shown in Fig. 10 to be handled on the directory database 241 in a...

...CLAIMS media switching type infrastructure and a media sharing type infrastructure are combined coexistently, comprising:

- a **code** section for establishing correspondences among information concerning physical connections (1010) of equipment on said computer ...

...A storage medium for a network management system according to claim 7,

further comprising:

- a **code** section (22; 221) for executing identification of equipment (25) connected to said computer network (20...

...A storage medium for a network management system according to claim 7,

further comprising:

- a **code** section (22; 50) for searching physical addresses (53) intrinsic to said network ports on the...

...A storage medium for a network management system according to claim 7,

further comprising:

- a **code** section (36) for displaying said physical interconnection information, logical network information or user information in different areas (1010, 1020, 1040), respectively, in the form of relevant icons,
- a **code** section (1047; 1027) for displaying association of the information in said individual areas;
- a **code** section (210; 2103) for displaying the information in said individual areas in one frame three-dimensionally; and
- a **code** section for generating displays indicating mutual relations among said areas in which said icons are...

3/K/2

DIALOG(R)File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Document management systems using **obj ct and agent-**oriented** methods**

PATENT ASSIGNEE:

****HITACHI****, LTD...

...ABSTRACT factors increase. In the system configuration with an object execution environment (1) implemented with an ****object**--**oriented**** function and an agent execution environment (2) implemented with an agent-oriented function, a unit...

...execution environment. With this configuration, a system developer can use the merits of both the ****object**--** and **agent-**oriented**** paradigms by implementing a function necessary for stable operation by an object and a function...

...SPECIFICATION high stability and easy maintenance.

First conventional techniques for such a system configuration are an ****object**--**oriented**** approach : **"**Object**--**Oriented** Analysis and Design"** by Shinich HONIDEN and Akihiro YAMASHIRO, Journal of Information Processing Society of Japan, Vol. 35, No. 5, 1994 (hereinafter called Prior Art 1). According to the ****object**--**oriented**** approach described in this paper, a subject in real world (called an object) and an...

...and each object requests an another object to execute a particular task. Introduction of this ****object**--**oriented**** paradigm, simulating approximately to modelling and encapsulating of real subject world, makes the change range...

...of adding a function can be improved.

Attention has recently been drawn to a distributed ****object**--**oriented**** approach in which a plurality of hardware components and objects on OSes connected by a network can be cooperated : **"Latest **Object**--**Oriented** Practice Guide"** by Nikkei BP Ltd., 1995 (hereinafter called Prior Art 2).

Second conventional techniques...

...communication language. Operation of an agent itself and cooperation with another agent provide system functions.

****Object**--**oriented**** technologies have been recently used for providing particular means for efficiently developing highly sophisticated software. An agent-oriented system using such an ****object**--**oriented**** architecture as its basic technologies has been developed : **"QKML as an Agent Communication Language"**, by...

...November 1994 (hereinafter called Prior Art 4). An agent-oriented architecture is configured on an ****object**--**oriented**** architecture. An agent can be considered as an object having functions extended by the agent...is no time required for the message exchange (Prior Art 3).

As compared to the ****object**--**oriented**** paradigm of Prior Art 1, the agent-oriented paradigm of Prior Art 2 provides an...agents in the expanded system increases, and capable of maintaining the merits of both the ****object**--** and **agent-**oriented**** paradigms.

In a first aspect the invention provides a system configuration integrating an environment for...

...agent execution environment allows development to be performed by using the merits of both the ****object**--** and **agent-**oriented**** paradigms. The means for changing an agent into an object executes the processes of an ...represents an object execution environment for executing a module which is implemented with functions of ****object**--**oriented**** paradigm, and reference numeral 2 represents an agent execution environment for executing a module which is implemented with functions of **agent-**oriented**** paradigm. The ****object**** execution environment 1 may use ORB

(Object Request Broker) products described in Prior Art 2...

...With such a system configuration, a system developer can retain the merits of both the ****object****- and agent-****oriented**** paradigms, for example, implementing a stable operation function by using objects and a function with...which a mobile agent is enciphered at the originating environment into a specific transfer format ****code**** and the agent received at the destination environment is decoded which is then interpretatively analyzed...process. In the former case, five steps are executed, including an image input step, a ****coded**** text conversion step through character recognition, a structured document conversion step, a structured document generation...

...described input processes of an electronic document. Therefore, only the image input process and the ****coded**** text conversion through character recognition, respectively at the function layer, will be described with reference...to encode the image data into text data. After the coding is normally completed, the ****coded**** data is returned back to the registration management/control object. If not completed normally, a... the document and an identifier for identifying the link destination document (e.g., a national ****code**** and a national book number of JAPAN/MARC used by the National Diet Library). The...to the present invention, a system developer can develop using the merits of both the ****object****- and agent-****oriented**** paradigms, for example by implementing the function requiring stable operation by an object and the...

...CLAIMS comprising:

- a module implemented with an agent-oriented function (1);
 - a module implemented with an ****object****-****oriented**** function (2); and
 - means (5) for changing an agent into an object and executing said module implemented with an agent-oriented function as said module implemented with an ****object****-****oriented**** function.
2. A document management system according to claim 1, wherein said module implemented with an ****object****-****oriented**** function includes a management/control object (8) for collectively managing and controlling objects in unit...
11. A document management system according to claim 1, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
 - a presentation layer object (500) for providing a...
 12. A document management system according to claim 2, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
 - a presentation layer object for providing a user...
 13. A document management system according to claim 3, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
 - a presentation layer object for providing a user...
 14. A document management system according to claim 4, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
 - a presentation layer object for providing a user...
 15. A document management system according to claim 5, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
 - a presentation layer object for providing a user...
 16. A document management system according to claim 6, wherein said module implemented with an ****object****-****oriented**** function has a

three-layer structure comprising:
a presentation layer object for providing a user...

...17. A document management system according to claim 7, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
a presentation layer object for providing a user...

...18. A document management system according to claim 8, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
a presentation layer object for providing a user...

...19. A document management system according to claim 9, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
a presentation layer object for providing a user...

...20. A document management system according to claim 10, wherein said module implemented with an ****object****-****oriented**** function has a three-layer structure comprising:
a presentation layer object for providing a user...

3/K/3

DIALOG(R) File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
PATENT ASSIGNEE:

****HITACHI****, LTD...

...applicant designated states: DE;FR;GB;IT)
****HITACHI**** MICROCOMPUTER SYSTEM LTD...

...SPECIFICATION system registers each composed of 32 bits. The RISC type instruction set has its instruction ****code**** efficient by an instruction having a fixed length of 16 bits. An unconditional/conditional branching ...a divider unit DIVU. The divider unit DIVU of this embodiment performs a division of ****coded**** 64 bits 32 bits or 32 bits 32 bits to determine a quotient of 32...having a fixed length instruction of 16 bits is estimated to have a smaller object ****code**** size than that of the RISC processor having a fixed length instruction of 32 bits. For a small ****code**** size, the number of bytes to be fetched is reduced, if instructions of the same...

...however, the RISC architecture of 32 bits were changed to that of 16 bits, the ****code**** size would not be one half. This is because the maximum to be incorporated as...

...use a plurality of instructions. Since the number of bits becomes short as an instruction ****code****, one instruction may be two instructions so as to change a three-operand address into...

...values of registers before the operation instruction.
In order to inspect this, therefore, the object ****code**** sizes produced for the single-chip microcomputer according to the present invention were examined. The...

...than those of the aforementioned fixed length of 16 bits. In other words, the object ****code**** size of the instruction having the fixed length of 16 bits is smaller by 30...

...or the 32-bit RISC architecture is changed to a 16-bit one, the object

****code**** size is reduced to 2/3, and the number of instructions to be executed is...leaves the assembler language and comes close to the C-language and further to an ****object**** ****oriented**** language such as the C++ language in connection with a portion of applications while introducing the ****object****-****orientation****. In this situation, the interruption of the program execution at the unit of statement and...36, the CPU is constructed of: an instruction register IR for temporarily latching the instruction ****code**** which is read out of the cache memory through the data bus (or cache bus...

...unit for producing a control signal for an instruction execution unit by decoding the instruction ****code**** read out; and the instruction execution unit for executing the arithmetic operations. In the instruction...

...are connected with internal buses A, B and C.

The CPU reads out the instruction ****code**** latched in the cache memory CAM through the data bus DBI and fetches it into the instruction register IR. The instruction ****code**** thus fetched is decoded by the control unit to output the control signal for the...is copied in all the bits of the register HRH so as to extend the ****code**** of the dividend. At the end of the operation, the remainder of the result is...is used at the first cycle of the non-regression method to determine the "MSB (****code****) of the previous arithmetic result".

(3) Non-Regression Method ("100011" - "001110"):
The processing of the...

3/K/4

DIALOG(R)File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
PATENT ASSIGNEE:

****HITACHI****, LTD...

...applicant designated states: DE;FR;GB;IT)
****HITACHI**** MICROCOMPUTER SYSTEM LTD...

...SPECIFICATION system registers each composed of 32 bits. The RISC type instruction set has its instruction ****code**** efficient by an instruction having a fixed length of 16 bits. An unconditional/conditional branching ...a divider unit DIVU. The divider unit DIVU of this embodiment performs a division of ****coded**** 64 bits 32 bits or 32 bits 32 bits to determine a quotient of 32...having a fixed length instruction of 16 bits is estimated to have a smaller object ****code**** size than that of the RISC processor having a fixed length instruction of 32 bits. For a small ****code**** size, the number of bytes to be fetched is reduced, if instructions of the same...

...however, the RISC architecture of 32 bits were changed to that of 16 bits, the ****code**** size would not be one half. This is because the maximum to be incorporated as...

...use a plurality of instructions. Since the number of bits becomes short as an instruction ****code****, one instruction may be two instructions so as to change a three-operand address into...

...values of registers before the operation instruction.

In order to inspect this, therefore, the object ****code**** sizes produced for the single-chip microcomputer according to the present invention were examined. The...

...than those of the aforementioned fixed length of 16 bits. In other

words, the object ****code**** size of the instruction having the fixed length of 16 bits is smaller by 30...

...or the 32-bit RISC architecture is changed to a 16-bit one, the object ****code**** size is reduced to 2/3, and the number of instructions to be executed is...leaves the assembler language and comes close to the C-language and further to an ****object**** ****oriented**** language such as the C++ language in connection with a portion of applications while introducing the ****object****-****orientation****. In this situation, the interruption of the program execution at the unit of statement and...36, the CPU is constructed of: an instruction register IR for temporarily latching the instruction ****code**** which is read out of the cache memory through the data bus (or cache bus...

...unit for producing a control signal for an instruction execution unit by decoding the instruction ****code**** read out; and the instruction execution unit for executing the arithmetic operations. In the instruction...

...are connected with internal buses A, B and C.

The CPU reads out the instruction ****code**** latched in the cache memory CAM through the data bus DBI and fetches it into the instruction register IR. The instruction ****code**** thus fetched is decoded by the control unit to output the control signal for the...is copied in all the bits of the register HRH so as to extend the ****code**** of the dividend. At the end of the operation, the remainder of the result is...is used at the first cycle of the non-regression method to determine the "MSB (****code****) of the previous arithmetic result".

(3) Non-Regression Method ("100011" - "001110"):
The processing of the...

3/K/5

DIALOG(R)File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
PATENT ASSIGNEE:

****HITACHI****, LTD...

...applicant designated states: DE;FR;GB;IT)
****HITACHI**** MICROCOMPUTER SYSTEM LTD...

...SPECIFICATION system registers each composed of 32 bits. The RISC type instruction set has its instruction ****code**** efficient by an instruction having a fixed length of 16 bits. An unconditional/conditional branching ...a divider unit DIVU. The divider unit DIVU of this embodiment performs a division of ****coded**** 64 bits 32 bits or 32 bits 32 bits to determine a quotient of 32...having a fixed length instruction of 16 bits is estimated to have a smaller object ****code**** size than that of the RISC processor having a fixed length instruction of 32 bits. For a small ****code**** size, the number of bytes to be fetched is reduced, if instructions of the same...

...however, the RISC architecture of 32 bits were changed to that of 16 bits, the ****code**** size would not be one half. This is because the maximum to be incorporated as...

...use a plurality of instructions. Since the number of bits becomes short as an instruction ****code****, one instruction may be two instructions so as to change a three-operand address into...

...values of registers before the operation instruction.

In order to inspect this, therefore, the object ****code**** sizes produced

for the single-chip microcomputer according to the present invention were examined. The...

...than those of the aforementioned fixed length of 16 bits. In other words, the object **code** size of the instruction having the fixed length of 16 bits is smaller by 30...

...or the 32-bit RISC architecture is changed to a 16-bit one, the object **code** size is reduced to 2/3, and the number of instructions to be executed is...leaves the assembler language and comes close to the C-language and further to an **object-oriented** language such as the C++ language in connection with a portion of applications while introducing the **object-orientation**. In this situation, the interruption of the program execution at the unit of statement and...36, the CPU is constructed of: an instruction register IR for temporarily latching the instruction **code** which is read out of the cache memory through the data bus (or cache bus...

...unit for producing a control signal for an instruction execution unit by decoding the instruction **code** read out; and the instruction execution unit for executing the arithmetic operations. In the instruction...
...are connected with internal buses A, B and C.

The CPU reads out the instruction **code** latched in the cache memory CAM through the data bus DBI and fetches it into the instruction register IR. The instruction **code** thus fetched is decoded by the control unit to output the control signal for the...is copied in all the bits of the register HRH so as to extend the **code** of the dividend. At the end of the operation, the remainder of the result is...is used at the first cycle of the non-regression method to determine the "MSB (**code**)" of the previous arithmetic result".

(3) Non-Regression Method ("100011" - "001110"):

The processing of the...

3/K/6

DIALOG(R)File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
PATENT ASSIGNEE:

HITACHI SOFTWARE ENGINEERING CO., LTD...

...SPECIFICATION improvement and recognition accuracy, the reader has employed a knowledge controlled pattern recognition technique, where **object-oriented** information are explanatorily separated from the analysis process and formalized as knowledge (low level knowledge...the results of recognition of the character strings; a column 923 indicative of data of **codes** of the characters of the recognized character string; and a column 924 indicative of the...of recognition, and, when it is found that the result of recognition is suitable, the **code** of the character is stored in the character string table 920 as character **code** data 923. It is to be noted herein that steps 360 and 370 are exchangeable...

3/K/7

DIALOG(R)File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
PATENT ASSIGNEE:

Hitachi, Ltd...

...SPECIFICATION Computer, April 24 Issue, 1989, pp. 81 to 92. This interface is featured in an **object-oriented** environment.

The above-described conventional techniques do not consider the handwriting environment allowing a realistic...and its process environment capable of recognizing a handwritten stroke and converting it into a **code** of a character, graphics, line, or edit symbol, and that the screen of the handwriting...

...be recognized and not recognized, and an inputted handwritten stroke is converted into a predetermined **code** data or image data in correspondence with the data inputted area.

The handwriting coordinate input...

...a mechanism allowing to describe a recognition function to convert a handwritten stroke into a **code** and a process function to use a network. Therefore, it is possible to configure an...will be described later, this language is a dedicated handwriting interpreter using the concept of **object-oriented** programming recently highlighted as a man-machine interface, which is characterized particularly in management and...direction. When another end point comes, in accordance with the obtained data (e.g., quantum **codes** in the four directions), a U-character shaped rectangular area is separated.

(iii) A method...

...string when defining a character screen, and by searching the mapping coordinates and a blank **code** in the character string.

Instead of the automatic area deriving methods described above, other methods...

...executed to generate the UI/HAND-TANK definition data T200. This data is an intermediate **code** and interpreted and executed by the interpreter shown in Fig. 11.

The detailed flow chart...

...using the already defined formatted document. This process is executed by using the above-described **object-oriented** programming scheme. The fundamental concept of this scheme will first be described, and then the...another object to execute some process. This request is conducted through message activation of the **object-oriented** programming. A message activation has the following format.

SEND object name message name (parameter)
The...

...messages 1 to 3 represent the message names.

As described so far, according to the **object-oriented** programming, objects are sequentially processed by means of event activation and message activation.

After all...

...character, and a document is transferred to a mail destination represented by this recognized character **code**.

Statements at lines 1 to 3 in Fig. 21 describe a definition of the type...this type is an upper case alphabet ALPHA(underscore)L type and only the character **codes** for H, I, T, A, and C are permitted. Therefore, if an area is defined...

...a specification area G720 often uses characters specific to the entered item name. If particular **codes** for that item name are declared in advance, it is possible to give an alarm...

...object is transferred (at line 14). Then, there is transferred a message indicating that the **code** representative of the recognition results is registered as the receiver name (at line 15). Lastly...message "edit

wird.

13. Vorrichtung nach einem der Anspruche 1 bis 3, bei der ein Handschrifteneingabeglas...
- ...CLAIMS ou plusieurs traits manuscrits dans ladite unite d'entree d'écriture manuscrite (H211) comme un **code** predetermine, et executer ladite operation de traitement decrite.
3. Dispositif selon la revendication 1, dans...
- ...edition, respectivement, incluent un descriptif pour designer une plage admise pour designer un ou plusieurs **codes** d'objet de reconnaissance et un traitement d'execution pour ledit descriptif.
10. Dispositif selon...
- ...selon la revendication 8, dans lequel, lorsqu'un trait du type edition est entre, un **code** a editer sous les coordonnees dudit trait est discrimine, et un traitement d'edition est execute conformement au type dudit **code**.
13. Dispositif selon l'une quelconque des revendications 1 a 3, dans lequel une vitre...

3/K/8

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PATENT ASSIGNEE:

HITACHI, LTD...

...SPECIFICATION a program.

The knowledge processing system generally comprises a knowledge base which stores therein knowledges **coded** in a machine-readable form for use in solving a problem and an inference program...the table 1 mentioned below is represented in the form of rules by adopting an **object-oriented** programming procedure. The general-purpose search program contains rule groups for initialization, labeling, search execution... operators, respectively. These programs are described in a C-language by making use of the **object-oriented** programming procedure.

In the preparation of the knowledge base according to the instant embodiment described...The general-purpose search program is a program represented in rule forms by using an **object-oriented** programming procedure, as in the case of the first embodiment. Thus, this

3/K/9

DIALOG(R)File 348:(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

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PATENT ASSIGNEE:

HITACHI, LTD...

...SPECIFICATION relates to a method and an apparatus for image recognition to calculate the position and **orientation** of an **object** article and, more particularly, to a method and an apparatus for **calculating** the position **and** **orientation** of a whole object article inclusive of its partial shapes by computing the linear equations...

...feature points are obtained, at least two feature points are identified by checking the data **relating** to the **distances** of said at least two feature points from other feature points with reference to stored...

...each one of a plurality of feature points and the other feature points and the **orientation** **of** said **object** article is determined based on a direction through said at least two identified feature points

show files;ds;t 4/3/all;t 5/3/all
 File 348:EUROPEAN PATENTS 1978-1999/DEC W51
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Set	Items	Description
S1	7324	PA="HITACHI"
S2	21	S1 AND OBJECT(2N)ORIENT?
S3	9	S2 AND CODE?
S4	1	AU="NAYA HIDEMITSU"
S5	3	AU="YOKOYAMA TAKANORI"

4/3/1

DIALOG(R)File 348:EUROPEAN PATENTS
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00912624

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
Navigation system and information medium for the navigation system
Navigationssystem und Speichermedium dafur
Systeme de navigation et support d'information pour le systeme de navigation

PATENT ASSIGNEE:

Hitachi, Ltd., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo,
 101, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

****Naya, Hidemitsu****, Moriyama APT 2-201, 17, Moriyama-cho 3-chome,
 Hitachi-shi, Ibaraki 316, (JP)
 Fukunaga, Yasushi, 5-2, Mikanohara-cho 2-chome, Hitachi-shi, Ibaraki 316,
 (JP)
 Nakamura, Kozo, 628-2, Baba-cho, Hitachioota-shi, Ibaraki 313, (JP)

LEGAL REPRESENTATIVE:

Beetz & Partner Patentanwalte (100712), Steinsdorfstrasse 10, 80538
 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 833289 A1 980401 (Basic)

APPLICATION (CC, No, Date): EP 97115932 970912;

PRIORITY (CC, No, Date): JP 96254678 960926

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G08G-001/0968

ABSTRACT WORD COUNT: 169

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9814	669
SPEC A	(English)	9814	6868
Total word count - document A			7537
Total word count - document B			0
Total word count - documents A + B			7537

5/3/1

DIALOG(R)File 348:EUROPEAN PATENTS
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00257396

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
A data display method.

Anzeigeverfahren.

Methode d'affichage.

PATENT ASSIGNEE:

HITACHI, LTD., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo
 101, (JP), (applicant designated states: DE;GB)

INVENTOR:

Tani, Masayuki, Kouwa-Ryou B-412 3-8-18 Kokubu-cho, Hitachi-shi Ibaraki

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 Ibaraki 316, (JP)
 Watanabe, Norito, Yuuhou-Ryou 210 6-20-3 Ayukawa-cho, Hitachi-shi Ibaraki
 316, (JP)
 Yokoyama, Takanori, 1283 Shimokawai-cho, Hitachioota-shi Ibaraki 313,
 (JP)
 Tanifuji, Shinya, 2-20-1 Daihara-cho, Hitachi-shi Ibaraki 316, (JP)
 LEGAL REPRESENTATIVE:
 Patentanwalt Beetz - Timpe - Siegfried Schmitt-Fumian - Mayr (100712),
 Steinsdorfstrasse 10, D-80538 Munchen, (DE)
 PATENT (CC, No, Kind, Date): EP 255699 A2 880210 (Basic)
 EP 255699 A3 900627
 EP 255699 B1 950927
 APPLICATION (CC, No, Date): EP 87111041 870730;
 PRIORITY (CC, No, Date): JP 86178659 860731
 DESIGNATED STATES: DE; GB
 INTERNATIONAL PATENT CLASS: G06T-011/80; G06F-003/033;
 ABSTRACT WORD COUNT: 151

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	404
CLAIMS B	(English)	EPAB95	612
CLAIMS B	(German)	EPAB95	496
CLAIMS B	(French)	EPAB95	663
SPEC A	(English)	EPABF1	3595
SPEC B	(English)	EPAB95	3356
Total word count - document A			3999
Total word count - document B			5127
Total word count - documents A + B			9126

5/3/2

DIALOG(R)File 348:EUROPEAN PATENTS
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00160628

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Method and apparatus for recognizing and displaying handwritten characters and figures.

Verfahren und Anlage zum Erkennen und Anzeigen handgeschriebener Zeichen und Figuren.

Procede et dispositif de reconnaissance et affichage de caracteres et figures manuscrites.

PATENT ASSIGNEE:

HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo
 100, (JP), (applicant designated states: CH;DE;FR;GB;IT;LI;NL;SE)

INVENTOR:

Fukunaga, Yasushi, 17-2-503, Moriyamacho-3-chome, Hitachi-shi, (JP)
 Kuzunuki, Soshiro, 3600-150, Nakane, Katsuta-shi, (JP)
 Shojima, Hiroshi, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi, (JP)
 Yokoyama, Takanori, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi,
 (JP)

Koga, Kazuyoshi, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi, (JP)
 Hirasawa, Kotaro, 10-7, Kanesawacho-7-chome, Hitachi-shi, (JP)
 Kawada, Shinichi, 1382-8, Arajukucho, Hitachiota-shi, (JP)

LEGAL REPRESENTATIVE:

Patentanwalt Beetz - Timpe - Siegfried Schmitt-Fumian - Mayr (100712)
 , Steinsdorfstrasse 10, D-80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 156394 A2 851002 (Basic)
 EP 156394 A3 880831
 EP 156394 B1 930714

APPLICATION (CC, No, Date): EP 85103823 850329;

PRIORITY (CC, No, Date): JP 8460717 840330

DESIGNATED STATES: CH; DE; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: G06K-009/22;

ABSTRACT WORD COUNT: 123

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	516
CLAIMS B	(German)	EPBBF1	452
CLAIMS B	(French)	EPBBF1	597
SPEC B	(English)	EPBBF1	3736
Total word count - document A			0
Total word count - document B			5301
Total word count - documents A + B			5301

5/3/3

DIALOG(R)File 348:EUROPEAN PATENTS

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00160450

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Method for designating a recognition mode in a hand-written character/graphic recognizer.

Verfahren zum Bezeichnen einer Erkennungsart in einem Gerat zur Erkennung handgeschriebener Zeichen/Grafiken.

Procede pour designer un mode de reconnaissance dans un dispositif de reconnaissance de caracteres manuscrits/graphiques.

PATENT ASSIGNEE:

HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 100, (JP), (applicant designated states: CH;DE;FR;GB;IT;LI;NL;SE)

INVENTOR:

Kuzunuki, Soshiro, 3600-150, Nakane, Katsuta-shi, (JP)

Shojima, Hiroshi, c/o HITACHI, LTD. 6, Kanda Surugadai 4-chome, Chiyoda-ku Tokyo, (JP)

Yokoyama, Takanori, c/o HITACHI, LTD. 6, Kanda Surugadai 4-chome, Chiyoda-ku Tokyo, (JP)

Fukunaga, Yasushi, 17-2-503, Moriyamacho-3-chome, Hitachi-shi, (JP)

Hirasawa, Kotaro, 10-7, Kanesawacho-7-chome, Hitachi-shi, (JP)

LEGAL REPRESENTATIVE:

Patentanwalte Beetz sen. - Beetz jun. Timpe - Siegfried -

Schmitt-Fumian (100711), Steinsdorfstrasse 10, W-8000 Munchen 22, (DE)

PATENT (CC, No, Kind, Date): EP 157354 A2 851009 (Basic)

EP 157354 A3 880914

EP 157354 B1 920115

APPLICATION (CC, No, Date): EP 85103643 850327;

PRIORITY (CC, No, Date): JP 8458298 840328

DESIGNATED STATES: CH; DE; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: G06K-009/00; G06K-009/78;

ABSTRACT WORD COUNT: 83

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	672
CLAIMS B	(German)	EPBBF1	619
CLAIMS B	(French)	EPBBF1	853
SPEC B	(English)	EPBBF1	2936

show files;ds;t 7/3,k/all;t 9/3/all
 File 275:GALE GROUP COMPUTER DB(TM) 1983-1999/JAN 05
 (c) 1999 THE GALE GROUP
 File 674:COMPUTER NEWS FULLTEXT 1989-1999/DEC W2
 (c) 1999 IDG COMMUNICATIONS
 File 16:GALE GROUP PROMT(R) 1990-1999/JAN 05
 (c) 1999 THE GALE GROUP
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 15:ABI/INFORM(R) 1971-1999/Dec 15
 (c) 1999 Bell & Howell
 File 148:GALE GROUP TRADE & INDUSTRY DB 1976-1999/JAN 05
 (c)1999 THE GALE GROUP
 File 636:GALE GROUP NEWSLETTER DB(TM) 1987-1999/JAN 05
 (c) 1999 THE GALE GROUP
 File 624:MCGRAW-HILL PUBLICATIONS 1985-1999/DEC 30
 (c) 1999 MCGRAW-HILL CO. INC
 File 9:BUSINESS & INDUSTRY(R) JUL/1994-1999/JAN 03
 (c) 1999 RESP. DB SVCS.
 File 88:GALE GROUP BUSINESS A.R.T.S. 1976-1999/DEC 29
 (c) 1999 THE GALE GROUP
 File 47:GALE GROUP MAGAZINE DB(TM) 1959-1999/JAN 05
 (c) 1999 THE GALE GROUP
 File 75:TGG Management Contents(R) 86-1999/Dec W1
 (c) 1999 The Gale Group
 File 647:CMP COMPUTER FULLTEXT 1988-1999/DEC W3
 (c) 1999 CMP
 File 486: PRESS-TELEGRAM 1992- 1999/Dec 29
 (c) 1999 LONG BEACH PRESS-TELEGRAM
 File 637:JOURNAL OF COMMERCE 1986-1999/DEC 30
 (c) 1999 JOURNAL OF COMMERCE INC
 File 484:Periodical Abstracts Plustext 1986-1999/Nov W3
 (c) 1999 Bell & Howell

Set	Items	Description
S1	0	AU="NARISAWA F"
S2	0	AU="NAYA H"
S3	3	AU="YOKOYAMA, T":AU="YOKOYAMA, T."
S4	3	AU="OHKAWA, K."
S5	62	HITACHI?(5N)(OBJECT(2N)ORIENT?)
S6	20	S5 AND CODE?
S7	14	RD (unique items)
S8	6	S3 OR S4
S9	6	RD (unique items)

(7/3,K/1 (Item 1 from file: 275)
 DIALOG(R)File 275:GALE GROUP COMPUTER DB(TM)
 (c) 1999 THE GALE GROUP. All rts. reserv.

01804821 SUPPLIER NUMBER: 17155728 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Client/server and host app. development tools.(1995 Database Buyer's Guide and Client/Server Sourcebook)(Buyers Guide)
 DBMS, v8, n6, p20(13)
 May 15, 1995
 DOCUMENT TYPE: Buyers Guide ISSN: 1041-5173 LANGUAGE: English
 RECORD TYPE: Fulltext; Abstract
 WORD COUNT: 20277 LINE COUNT: 01789

... kit is equipped with 4D Insider, a cross-referencing utility. This tool provides developers with ****code**** sharing and documentation generation capabilities, and lets users create ****code**** libraries for quick ****code**** development. Ad hoc reporting capabilities are provided through SQL Reporter. Using the 4D Passport deployment...

applications with little or no ****code**** changes. Reader service #317.

SQL ****Coder**** 1.6

Platinum Technology Inc., Oakbrook Terrace, IL

708-620-5000

A team-oriented development...

...including Oracle and SQL Server. Provides for the creation, organization, and management of database server ****code**** objects, including stored procedures, triggers, scripts, packages, and functions. Objects are stored as text in the SQL ****Coder**** repository. The repository is created in a user's database and allows access to information...

...projects. Deployment function recognizes development, test, and productivity servers and provides full reference checking. Provides ****code**** reusability, faster implementation, and automatic ****code**** comparison. Available for Windows and Windows NT at \$795 for a single-user license; \$1995...

...C/C++ object-oriented, client/server applications that work with all major databases. Users can ****code**** and deploy on multiple operating systems (Windows, DOS, Windows NT, Unix, OS/2, and Windows 95) with no ****code**** changes. Provides multilevel access and lets the user write one set of ****code**** that can access all major databases. Customers can prototype using one database and deploy using...

...be associated with screen objects, create and populate forms from multiple data sources, and generate ****code**** for data access. Includes a visual programming interface, API library, manual and online help, database ...level, designing a business model that becomes the foundation for the client/server application. Smalltalk ****code**** is automatically generated. Changes made to the model are reflected back into the ****code**** and vice versa. Also offers a mapping tool component that quickly links object models to...

...system design, and the application always remain synchronized. Provides integration among business analysis, design, and ****code**** generation. Total Synchronicity is integrated with Total Enfin Smalltalk programming environment. \$4045-\$6995. Reader service...

...X from layout-only IDT products. It lets developers interactively create, modify, test, and generate ****code**** for the behavioral portions of their applications' user interfaces. Supports object-oriented development, providing a...

...interfaces for existing keyboard-oriented applications. Generates C++, K&R, or ANSI C, and UIL ****code****, and contains enhancements to facilitate object-oriented development in C++. Available for all major Unix...data through the ObjectLens. Argos supports object modeling, using Rumbaugh notation, and provides for synchronous ****code**** generation as models are created and evolved. Users do not need to write ****code****. It also keeps the models and ****code**** in sync and provides a full visual programming environment for creating applications that support drag-and-drop. Argos also supports enterprise development through integrated versioning and ****code**** management at the model level. The Versant ODBMS provides a repository, allowing all development work...

...Digitalk Inc., Santa Ana, CA

714-513-3000; 800-546-6400

Designed to create application ****code****. Available for Windows 3.1, Windows NT, and OS/2, it is the successor to...support a range of client/server models. Lets programmers develop the client and server code ****simultaneously****. Supports development of OS/2 and Windows 3.1 clients and MVS/ESA, VSE/ESA...

(7/3,K/2

(Item 2 from file: 275)

DIALOG(R)File 275:GALE GROUP COMPUTER DB(TM)
(c) 1999 THE GALE GROUP. All rts. reserv.

01671472 SUPPLIER NUMBER: 15064590 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Object lessons to be learnt. (includes related articles on Petroleum Science and Technology Institute's use of Object Design's Objectstore, object database and elevator manufacturer Schindler's use of **Hitachi's **Object** IQ **object** **oriented** software)**

Mansell-Lewis, Emma

Computer Weekly, p30(2)

Jan 27, 1994

ISSN: 0010-4787

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1770

LINE COUNT: 00141

...use of Object Design's Objectstore, object database and elevator manufacturer Schindler's use of **Hitachi's **Object** IQ **object** **oriented** software)**

...ABSTRACT: offers the possibility of faster application development cycles and the ability to reuse blocks of **code**, but many corporations are unwilling to undertake the costs involved in converting to this new...
... take a pure approach to object-oriented programming, you end up writing third generation language **code**, which is like buying a fast car and driving it in first gear. Yet don...

...DESCRIPTORS: Reusable **Code**

7/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:GALE GROUP COMPUTER DB(TM)
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01504728 SUPPLIER NUMBER: 12008036 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Minigrams.

Computergram International, n1890, CGI03310028

March 31, 1992

ISSN: 0268-716X

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 2593

LINE COUNT: 00212

... Co and Hitachi Europe Ltd have signed a deal giving Hewlett the right to distribute **Hitachi**'s **object**--**oriented** application development tool ObjectIQ: there are 4,000 licences to the product in Japan and...subscriber then calls Fax Mail from any touch-tone phone, enters a personally-chosen security **code**, and enters the number of the fax machine on which it is to be printed...

7/3,K/4 (Item 1 from file: 674)
DIALOG(R)File 674:COMPUTER NEWS FULLTEXT
(c) 1999 IDG COMMUNICATIONS. All rts. reserv.

053540

Uh-oh Cobol

22

Early hype has painted a bright future for object-oriented Cobol programmers. The present reality: A pretty bleak job market

Byline: Alan Radding

Journal: Computerworld

Page Number: 86

Publication Date: July 29, 1996

Word Count: 780

Line Count: 75

Text:

...Diego.

That gives it a familiar feel to programmers who move from procedural Cobol to ****object**--**oriented**** programming. Vendors such as IBM, ****Hitachi**** America Ltd. and Fujitsu America, Inc. are poised to make a big object Cobol splash...

...client/server computing.

“(It) will grow slowly. Its acceptance will occur because of the legacy ****code****,” Coker says. Expect to see object-oriented Cobol adopted first by those companies with large portfolios of procedural Cobol ****code****, such as the insurance and financial industries. Acucobol’s list of customers includes heavyweights such...

(7/3,K/5 (Item 1 from file: 16)
DIALOG(R)File 16:GALE GROUP PROMT(R)
(c) 1999 THE GALE GROUP. All rts. reserv.

05677720 Supplier Number: 50160310 (USE FORMAT 7 FOR FULLTEXT)

GLOBAL SOFTWARE MARKET

Software Industry Report, p5

May 25, 1998

Language: English Record Type: Fulltext

Article Type: Article

Document Type: Newsletter; Trade

Word Count: 834

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Unisys, ****Hitachi**** Ltd. Team Up On ****Object**--**Oriented**** Software
... the Unisys ClearPath HMP IX system. The agreement provides Unisys worldwide license rights to selected ****Hitachi**** ****object**--**oriented**** COBOL technologies including its compiler front-end, class libraries, object browser, file/record designer and...

...IX systems for COBOL development and first phase compile and the OS2200 node for final ****code**** generation and runtime execution.

Scotland’s First Software Center

Opens In Silicon Valley

Scotland, hungry...

(7/3,K/6 (Item 2 from file: 16)
DIALOG(R)File 16:GALE GROUP PROMT(R)
(c) 1999 THE GALE GROUP. All rts. reserv.

04244377 Supplier Number: 46214471 (USE FORMAT 7 FOR FULLTEXT)

Cobol Gets With Objects

InformationWeek, p70

March 11, 1996

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Tabloid; General Trade

Word Count: 2695

... language moves toward standardization. InformationWeek’s OpenLabs recently took a look at three versions of ****Object**--**oriented**** Cobol:
* ****Hitachi**** America Ltd.’s ****Object**--**Oriented**** Cobol version 2.0
* IBM VisualAge for Cobol version 1.0
* Micro Focus Inc.’s...

...in various stages of development. Each vendor has taken a slightly different tack in offering ****Object**--**oriented**** Cobol products.
****Hitachi**** prefers to play it safe, solid, and by the book. IBM builds on its System...

...that the data structure behind DBMgr may be changed without affecting the rest of the **code**.

The Object Management Group, a consortium of more than 300 software vendors, is defining bindings...

...in a language-neutral fashion. Oracle8, due by year's end, will support object storage.

Hitachi Object-Oriented Cobol

Although **Hitachi** is an unknown quantity to most software developers in the United States, it has developed...

...for the second quarter), it does offer an attractive and easy-to-use windowing environment.

Hitachi's Object-Oriented Cobol runs on Windows NT machines. **Hitachi** also offers **Object-oriented Cobol** compilers for Sun Solaris, Hewlett-Packard HP-UX, and Microsoft Windows 3.1 and...of innovation, honest capabilities that are easy to understand and use.

For CICS programmers, the **Code Assistant** removes much of the tedium of writing parameter lists. A Transaction Assistant accepts specifications using screen forms and automatically generates the necessary **code**.

At the heart of VisualAge for Cobol is SOM, IBM's Common Object Request Broker...

...a decade. It now finds itself in the unfamiliar position of playing catch-up to **Hitachi** in supporting **object-oriented** extensions. But **Hitachi's** lead is not insurmountable. Micro Focus offers a visual programming environment and more extensive...

...browser also allows programmers to view the hierarchy of the base class and the source **code**. The Palo Alto, Calif., developer should be commended for providing the base class source **code**; it is an excellent laboratory for programmers looking to understand how to program for reuse...

...investigation.

Another problem is that the Run-Time System at times simply refuses to allow **code** with errors to be animated, leaving the programmer completely in the dark as to ...spreadsheet; The benefit is in reducing the amount of time Cobol programmers spend maintaining legacy **code** and in reducing the development cycle for new applications.

Businesses that can develop their own...

...to keep them compatible.

C++ is not a proper superset of C; perfectly legal C **code** may break under a C++ compiler. In marketing-speak, the phrase to cover this incompatibility...

(7/3,K/7 (Item 3 from file: 16)
DIALOG(R)File 16:GALE GROUP PROMT(R)
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03636808 Supplier Number: 45129362 (USE FORMAT 7 FOR FULLTEXT)
CENTERLINE TOUTS ITS OBJECT-ORIENTED TOOL SET, CLAIMING IT'S THE REAL THING FOR CODE RE-USE
Computergram International, n2541, pN/A
Nov 10, 1994
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 568

(USE FORMAT 7 FOR FULLTEXT)

CENTERLINE TOUTS ITS OBJECT-ORIENTED TOOL SET, CLAIMING IT'S THE REAL THING FOR **CODE RE-USE**

TEXT:

...latest tool to support re-use in a meaningful way. It is not the first ****object** -**oriented**** package with this aim; ****Hitachi**** Ltd already offers an Object Re-use Library, however, CenterLine's chief technical officer Dave...

... to enable users to find and pull out software assets such as source and object ****code**** and analysis and design documents. According to Reed, ResourceCenter has deliberately been designed as a...

...it has already for software re-use, but CenterLine, best known for its ObjectCenter and ****CodeCenter**** Unix programming environments, remains convinced that putting out tools such as this will eventually goad...

(7/3,K/8 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/INFORM(R)

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01258902 99-08298

Uh-oh Cobol

Radding, Alan

Computerworld v30n31 PP: 86 Jul 29, 1996

ISSN: 0010-4841 JRNL CODE: COW

WORD COUNT: 905

...ABSTRACT: oriented Cobol will be adopted first by those companies with large portfolios of procedural Cobol ****code****, such as the insurance and financial industries. Although the signs may look bright for the...

...TEXT: Diego.

That gives it a familiar feel to programmers who move from procedural Cobol to ****object**--**oriented**** programming. Vendors such as IBM, ****Hitachi**** America Ltd. and Fujitsu America, Inc. are poised to make a big object Cobol splash...

...client/server computing.

"[It] will grow slowly. Its acceptance will occur because of the legacy ****code****," Coker says. Expect to see object-oriented Cobol adopted first by those companies with large portfolios of procedural Cobol ****code****, such as the insurance and financial industries. Acucobol's list of customers includes heavyweights such...

(7/3,K/9 (Item 1 from file: 148)

DIALOG(R)File 148:GALE GROUP TRADE & INDUSTRY DB

(c)1999 THE GALE GROUP. All rts. reserv.

10128190 SUPPLIER NUMBER: 20507480 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Unisys and **Hitachi Ltd., Collaborate on **Object**--**Oriented** Software.**

Business Wire, p4220047

April 22, 1998

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 785 LINE COUNT: 00075

Unisys and **Hitachi Ltd., Collaborat on **Object**--**Oriented** Softwar .**

TOKYO--(BUSINESS WIRE)--April 23, 1998--

Unisys licenses object technology from ****Hitachi****

and jointly develops ****Object**--**Oriented**** COBOL on ClearPath HMP

IX

Unisys Corp. and Hitachi Ltd., today announced that they are...

...the Unisys ClearPath HMP IX system.

The agreement provides Unisys worldwide license rights to selected ****Hitachi** **object**--**oriented**** COBOL technologies including its compiler front-end, class libraries, object browser, file/record designer and...

...IX systems for COBOL development and first phase compile and the OS2200 node for final ****code**** generation and runtime execution.

The resulting product will provide full COBOL 85 compatibility along with...

...fit," said Brian Hadfield, vice president and general manager of the Unisys ClearPath Business Initiative.

****Hitachi**** is focusing on developing ****object**--**oriented**** technology and expanding the market," noted Mitsuhiko Kodaira, general manager of Hitachi's Software Development Center. ****Hitachi**** added ****object**--**oriented**** functionality to COBOL in 1994 in the first implementation of Object-Oriented COBOL in the...

7/3,K/10 (Item 2 from file: 148)

DIALOG(R)File 148:GALE GROUP TRADE & INDUSTRY DB

c)1999 THE GALE GROUP. All rts. reserv.

08532615 SUPPLIER NUMBER: 18082520 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Cobol gets with objects. (IBM VisualAge for Cobol; **Hitachi **Object**--**Oriented** Cobol 2.0; Micro Focus Visual Object Cobol)(includes related article on new ANSI standard) (Software Review)(Evaluation)**

Arranga, Edmund C.

InformationWeek, n570, p70(6)

March 11, 1996

DOCUMENT TYPE: Evaluation ISSN: 8750-6874 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2917 LINE COUNT: 00237

Cobol gets with objects. (IBM VisualAge for Cobol; **Hitachi **Object**--**Oriented** Cobol 2.0; Micro Focus Visual Object Cobol)(includes related article on new ANSI standard...**

...ABSTRACT: Web integration. All three tested products implement a subset of the ANSI Cobol 97 standard. ****Hitachi**** America Ltd's ****Object**--**Oriented**** Cobol 2.0 concentrates on object-oriented features and does not yet offer a visual...

... language moves toward standardization. InformationWeek's OpenLabs recently took a look at three versions of ****Object**--**oriented**** Cobol:
 * ****Hitachi**** America Ltd.'s ****Object**--**Oriented**** Cobol version 2.0
 * IBM VisualAge for Cobol version 1.0
 * Micro Focus Inc.'s...

...in various stages of development. Each vendor has taken a slightly different tack in offering ****Object**--**oriented**** Cobol products. ****Hitachi**** prefers to play it safe, solid, and by the book. IBM builds on its System...

...that the data structure behind DBMgr may be changed without affecting the rest of the ****code****.

The Object Management Group, a consortium of more than 300 software vendors, is defining bindings...

...in a language-neutral fashion. Oracle8, due by year's end, will support object storage.

****Hitachi** **Object**--**Oriented** Cobol**

Although ****Hitachi**** is an unknown quantity to most software developers in the United States, it has developed...
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****Hitachi****'s ****Object**--**Oriented**** Cobol runs on Windows NT machines. ****Hitachi**** also offers ****Object**--**oriented**** Cobol compilers for Sun Solaris, Hewlett-Packard HP-UX, and Microsoft Windows 3.1 and...of innovation, honest capabilities that are easy to understand and use.

For CICS programmers, the ****Code**** Assistant removes much of the tedium of writing parameter lists. A Transaction Assistant accepts specifications using screen forms and automatically generates the necessary CICS ****code****.

At the heart of VisualAge for Cobol is SOM, IBM's Common Object Request Broker...

...a decade. It now finds itself in the unfamiliar position of playing catch-up to ****Hitachi**** in supporting ****object**--**oriented**** extensions. But ****Hitachi****'s lead is not insurmountable. Micro Focus offers a visual programming environment and more extensive...

...browser also allows programmers to view the hierarchy of the base class and the source ****code****. The Palo Alto, Calif., developer should be commended for providing the base class source ****code****; it is an excellent laboratory for programmers looking to understand how to program for reuse...

...investigation.

Another problem is that the Run-Time System at times simply refuses to allow ****code**** with errors to be animated, leaving the programmer completely in the dark as to ...spreadsheet; The benefit is in reducing the amount of time Cobol programmers spend maintaining legacy ****code**** and in reducing the development cycle for new applications.

Businesses that can develop their own...

...to keep them compatible.

C++ is not a proper superset of C; perfectly legal C ****code**** may break under a C++ compiler. In marketing-speak, the phrase to cover this incompatibility...

...TRADE NAMES: ****Hitachi** **Object**--**Oriented**** Cobol 2.0
(Application development software

7/3,K/11 (Item 3 from file: 148)
DIALOG(R)File 148:GALE GROUP TRADE & INDUSTRY DB
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05193017 SUPPLIER NUMBER: 10903814 (USE FORMAT 7 OR 9 FOR FULL TEXT)
World IT sales grow 8.9% to \$278.5B; North America hits \$184.7B. (the top 100 revenue earners in the information technology industry) (includes related profiles of the Datamation 100 companies) (Cover Story)

Kelly, Joseph

Datamation, v37, n12, p10(53)

June 15, 1991

DOCUMENT TYPE: Cover Story ISSN: 1062-8363 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 46795 LINE COUNT: 03697

... its second relational database software partner. HP will team up with Sun to jointly develop ****object**--**oriented**** software technology. ****Hitachi**** Ltd. has decided to collaborate on developing expert system applications. Computer Associates International Inc. will...revenues beyond

\$1 billion. And it funded much work on an important new storage product, ****code****-named Iceberg.

The person who bet the Colorado ranch on the 4400 and Iceberg is... coming years.

Motorola's overall is business, which consists of the Computer Group and the ****Codex**** Corp. and UDS/Motorola data communications subsidiaries, accounted for \$954 million in sales in 1990...

...rose 13% for Motorola, while net earnings were essentially flat at just under \$500 million.

****Codex**** has been struggling to make the transition from analog to digital technology and position itself...

...it posted an operating loss of \$1 million in 1990. Important new products introduced by ****Codex**** included release 3 of the ****Codex**** 9800 Series Network Management System. Sales and orders at UDS/Motorola rose primarily on the...

...IS activity is providing information systems for the health care market through products such as ****Code**** 3, Health Evaluation and MedLab. DATAMATION estimates the health group's sales at about \$75...users;

* Provide systems reengineering, which means making the most of a user organization's existing ****code**** and systems architecture;

* Create industry-specific software for markets in which the firm specializes-notably...is the market for computer-aided software engineering (CASE) tools. Second, its plans to "push ****code****" to the UNIX operating system and to workstation platforms such as, perhaps, the IBM RS...

7/3,K/12 (Item 1 from file: 636)
DIALOG(R)File 636:GALE GROUP NEWSLETTER DB(TM)
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03878996 Supplier Number: 48475628 (USE FORMAT 7 FOR FULLTEXT)

Unisys, **Hitachi Team On **Object**--**Oriented** Software**

High Performance Computing & Communications Week, v7, n19, pN/A

May 11, 1998

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 169

(USE FORMAT 7 FOR FULLTEXT)
Unisys, **Hitachi Team On **Object**--**Oriented** Software**
TEXT:

...the Unisys ClearPath HMP IX system. The agreement provides Unisys worldwide license rights to selected ****Hitachi** **object**--**oriented**** COBOL technologies including its compiler front-end, class libraries, object browser, file/record designer and...

... IX systems for COBOL development and first phase compile and the OS2200 node for final ****code**** generation and runtime execution.

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7/3,K/13 (Item 2 from file: 636)
DIALOG(R)File 636:GALE GROUP NEWSLETTER DB(TM)
(c) 1999 THE GALE GROUP. All rts. reserv.

03868001 Supplier Number: 48439057 (USE FORMAT 7 FOR FULLTEXT)

UNISYS: Unisys and **Hitachi, Ltd., collaborate on **object**--**

****orient d** software**

M2 Presswire, pN/A

April 23, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade
Word Count: 776

(USE FORMAT 7 FOR FULLTEXT)

UNISYS: Unisys and **Hitachi, Ltd., collaborate on **object**--
oriented software**

TEXT:

M2 PRESSWIRE-23 April 1998-UNISYS: Unisys and **Hitachi**, Ltd.,
collaborate on **object**--**oriented** software (C)1994-98 M2
COMMUNICATIONS LTD

RDATE:220498

-- Unisys licenses object technology from **Hitachi** and jointly
develops **Object**--**Oriented** COBOL on ClearPath HMP IX

Tokyo, Japan, April 23, 1998 -- Unisys Corporation and Hitachi, Ltd...
...the Unisys ClearPath HMP IX system. The agreement provides Unisys
worldwide license rights to selected **Hitachi** **object**--**oriented**
COBOL technologies including its compiler front-end, class libraries,
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...IX systems for COBOL development and first phase compile and the OS2200
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The resulting product will provide full COBOL 85 compatibility along
with...

...fit," said Brian Hadfield, vice president and general manager of the
Unisys ClearPath Business Initiative.

"**Hitachi** is focusing on developing **object**--**oriented**
technology and expanding the market.", notes Mitsuhiro Kodaira, general
manager of Hitachi's Software Development Center. "**Hitachi** added
object--**oriented** functionality to COBOL in 1994 in the first
implementation of Object-Oriented COBOL in the...

(7/3,K/14 (Item 1 from file: 647)
DIALOG(R)File 647:CMP COMPUTER FULLTEXT
(c) 1999 CMP. All rts. reserv.

01084253 CMP ACCESSION NUMBER: IWK19960311S0051

Product Review - Cobol Gets With Objects

Edmund C. Arranga

INFORMATIONWEEK, 1996, n 570, PG70

PUBLICATION DATE: 960311

JOURNAL CODE: IWK LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: OpenLabs

WORD COUNT: 2445

... language moves toward standardization. InformationWeek's OpenLabs
recently took a look at three versions of **Object**--**oriented** Cobol:
Hitachi America Ltd.'s **Object**--**Oriented** Cobol version 2.0
IBM VisualAge for Cobol version 1.0
Micro Focus Inc.'s...

...in various stages of development. Each vendor has taken a slightly
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Hitachi prefers to play it safe, solid, and by the book. IBM builds
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...that the data structure behind DBMgr may be changed without affecting
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****Hitachi** **Object**--**Oriented** Cobol**

Although ****Hitachi**** is an unknown quantity to most software developers in the United States, it has developed...

...for the second quarter), it does offer an attractive and easy-to-use windowing environment.

****Hitachi**'s **Object**--**Oriented** Cobol** runs on Windows NT machines. ****Hitachi**** also offers ****Object**--**oriented** Cobol** compilers for Sun Solaris, Hewlett-Packard HP-UX, and Microsoft Windows 3.1 and... of innovation, honest capabilities that are easy to understand and use.

For CICS programmers, the ****Code** Assistant** removes much of the tedium of writing parameter lists. A Transaction Assistant accepts specifications using screen forms and automatically generates the necessary CICS ****code****.

At the heart of VisualAge for Cobol is SOM, IBM's Common Object Request Broker...

...a decade. It now finds itself in the unfamiliar position of playing catch-up to ****Hitachi**** in supporting ****object**--**oriented**** extensions. But ****Hitachi**'s** lead is not insurmountable. Micro Focus offers a visual programming environment and more extensive...

...browser also allows programmers to view the hierarchy of the base class and the source ****code****. The Palo Alto, Calif., developer should be commended for providing the base class source ****code****; it is an excellent laboratory for programmers looking to understand how to program for reuse...

...investigation.

Another problem is that the Run-Time System at times simply refuses to allow ****code**** with errors to be animated, leaving the programmer completely in the dark as ...spreadsheet; The benefit is in reducing the amount of time Cobol programmers spend maintaining legacy ****code**** and in reducing the development cycle for new applications.

Businesses that can develop their own...

9/3/1 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/INFORM(R)

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00487446 90-13203

Updating Programs with PC Graphics

Gillett, J. E.; ****Ohkawa, K.****

Machine Design v62n3 PP: 170-174 Feb 8, 1990

ISSN: 0024-9114 JRNL CODE: MDS

9/3/2 (Item 1 from file: 88)

DIALOG(R)File 88:GALE GROUP BUSINESS A.R.T.S.

(c) 1999 THE GALE GROUP. All rts. reserv.

05200340 SUPPLIER NUMBER: 55884053

New high-field Nb₃Sn conductors prepared from Ta-Sn compound powder. (The 1998 Applied Superconductivity Conference)

Tachikawa, K.; Yamamoto, S.; ****Yokoyama, T.****; Kato, T

IEEE Transactions on Applied Superconductivity, 9, 2, 2500(5)

June, 1999

ISSN: 1051-8223

LANGUAGE: English

RECORD TYPE: Abstract

9/3/3 (Item 2 from file: 88)

DIALOG(R)File 88:GALE GROUP BUSINESS A.R.T.S.

(c), 1999 THE GALE GROUP. All rts. reserv.

04995077 SUPPLIER NUMBER: 53527564

Measurements of the absolute external luminescence quantum efficiency in ZnSe/ZnMgSSe multiple quantum wells as a function of temperature.

Westphaling, R.; Ullrich, P.; Hoffmann, J.; Kalt, H.; Klingshirn, C.;

Ohkawa, K.; Hommel, D

Journal of Applied Physics, 84, 12, 6871(6)

Dec 15, 1998

ISSN: 0021-8979 LANGUAGE: English RECORD TYPE: Abstract

9/3/4 (Item 3 from file: 88)

DIALOG(R)File 88:GALE GROUP BUSINESS A.R.T.S.

(c) 1999 THE GALE GROUP. All rts. reserv.

04690160 SUPPLIER NUMBER: 20439238

Internal photoluminescence and lifetime of light-emitting diodes on conductive ZnSe substrates.

Wenisch, H.; Fehrer, M.; **Ohkawa, K.**; Hommel, D.; Hartmann, H.; Rinas, U.; Prokesch, M

Journal of Applied Physics, v82, n9, p4690(3)

Nov 1, 1997

ISSN: 0021-8979 LANGUAGE: English RECORD TYPE: Abstract

9/3/5 (Item 1 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

(c) 1999 Bell & Howell. All rts. reserv.

04070281 SUPPLIER NUMBER: 99010340 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Massive haemorrhage into acoustic neurinoma related to rapid growth of the tumour

Ohta, S; **Yokoyama, T**; Nishizawa, S

British Journal of Neurosurgery (BJN), v12 n5, p455-457

Oct 1998

ISSN: 0268-8697 JOURNAL CODE: BJN

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1172

9/3/6 (Item 2 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

(c) 1999 Bell & Howell. All rts. reserv.

04070272 SUPPLIER NUMBER: 99010331 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Regrowth of the residual tumour after acoustic neurinoma surgery

Ohta, S; **Yokoyama, T**; Nishizawa, S; Uemura, K

British Journal of Neurosurgery (BJN), v12 n5, p419-422

Oct 1998

ISSN: 0268-8697 JOURNAL CODE: BJN

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2154

show files;ds;t 11/3,k/all;t 13/3,k/all;t 14/3,k/all
File 2:INSPEC 1969-1999/Nov W4
(c) 1999 Institution of Electrical Engineers
File 8:Ei Compendex(R) 1970-1999/Nov W4
(c) 1999 Engineering Info. Inc.
File 6:NTIS 64-1999/JAN W4
COMP&DISTR 1998 NTIS, INTL COPYRIGHT ALL RIGH
File 239:Mathsci(R) 1940-1999/Dec
(c) 1999 American Mathematical Society
File 144:Pascal 1973-1999/Nov
(c) 1999 INIST/CNRS
File 77:Conference Papers Index 1973-1999/Nov
(c) 1999 Cambridge Sci Abs
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info
File 34:SCISEARCH(R) CITED REF SCI 1990-1999/DEC W4
(c) 1999 INST FOR SCI INFO
File 108:AEROSPACE DATABASE 1962-1999/DEC
(c) 1999 AIAA
File 233:Microcomputer Abstracts 1981-1999/Dec
(c) 1999 Information Today Incl.
File 103:Energy SciTec 1974-1999/Dec B1
(c) 1999 Contains copyrighted material
File 62:SPIN(R) 1975-1999/Nov W3
(c) 1999 American Institute of Physics
File 14:MECHANICAL ENGINEERING ABS 1973-2000/JAN
(c) 1999 CAMBRIDGE SCI ABS
File 35:Dissertation Abstracts Online 1861-1999/Oct
(c) 1999 UMI
File 202:Information Science Abs. 1966-1999/Aug
(c) Information Today, Inc
File 94:JICST-EPLUS 1985-1999/SEP W3
(c)1999 JAPAN SCIENCE AND TECH CORP(JST)
File 98:General Sci Abs/Full-Text 1984-1999/Oct
(c) 1999 The HW Wilson Co.
File 99:Wilson Appl. Sci & Tech Abs 1983-1999/Nov
(c) 1999 The HW Wilson Co.
File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS
File 238:Abs. in New Tech & Eng. 1981-1999/Nov
(c) 1999 Reed-Elsevier (UK) Ltd.
File 65:Inside Conferences 1993-1999/Jun W3
(c) 1999 BLDSC all rts. reserv.

Set	Items	Description
S1	2	AU="NARISAWA F":AU="NARISAWA FUMIO"
S2	4	AU="NARISAWA, F":AU="NARISAWA, FUMIO"
S3	5	AU="NAYA HIDEMITSU"
S4	6	AU="NAYA H"
S5	2	AU="NAYA, HIDEMITSU"
S6	6	AU="NAYA, H."
S7	2972	AU="YOKOYAMA T"
S8	80	AU="YOKOYAMA TAKANARI":AU="YOKOYAMA TAKANORI"
S9	1	AU="OHKAWA, KEIICHIRO"
S10	26	(S7 OR S8) AND OBJECT(2N)ORIENT?
S11	2	S10 AND CODE?
S12	19	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S9
S13	12	RD (unique items)
S14	17	HITACHI?(3N)OBJECT()ORIENT?
S15	0	S14 AND CODE?
S16	12	RD S14 (unique items)

>>>KWIC option is not available in file(s): 14, 77

11/3,K/1 (Item 1 from file: 34)

DIALOG(R)File 34:SCISEARCH(R) CITED REF SCI
(c) 1999 INST FOR SCI INFO. All rts. reserv.

08067496 Genuine Article#: BN79M No. References: 6

Title: A **code generator with application-oriented size optimization for
object--**oriented** embedded control software**

Author(s): Narisawa F (REPRINT) ; Naya H; **Yokoyama T**

Corporate Source: HITACHI RES LAB,1-1 OMIKA CHO 7 CHOME/HITACHI/IBARAKI
3191292/JAPAN/ (REPRINT)

, 1998, V1543, P507-510

ISSN: 0302-9743 Publication date: 19980000

Publisher: SPRINGER-VERLAG BERLIN, HEIDELBERGER PLATZ 3, D-14197 BERLIN,
GERMANYLECTURE NOTES IN COMPUTER SCIENCE

Series: LECTURE NOTES IN COMPUTER SCIENCE

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: A **code generator with application-oriented size optimization for
object--**oriented** embedded control software**

Author(s): Narisawa F (REPRINT) ; Naya H; **Yokoyama T**

Abstract: We have developed an automatic **code** generator which generates
C language **code** from **object**--**oriented** specification
diagrams. It reduces the target program size 35% smaller than the size
of the program which was simply translated into C++ **code**. We
accomplished this effective optimization by removing some mechanisms of
object--**oriented** programming languages which are unused for our
target application, embedded real-time software. **Object**--
oriented programming languages provide many useful features such as
inheritances, constructors, destructors, virtual tables and instances
...

...and the runtime behavior of the software is fixed. We remove the unused
mechanisms of **object**--**orientation** by considering the feature of
the target application to reduce the size of the programs.

11/3,K/2 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPLUS

(c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

03907702 JICST ACCESSION NUMBER: 99A0202015 FILE SEGMENT: JICST-E

An **Object--**Oriented** Development Method for Embedded Control Systems.**

****YOKOYAMA TAKANORI** (1)**

(1) Hitachi, Ltd., Hitachi Res. Lab.

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report
(Institute of Electronics, Information and Communication Enginners),
1998, VOL.98,NO.440(SS98 35-38), PAGE.25-32, FIG.12, REF.12

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02.001

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

An **Object--**Oriented** Development Method for Embedded Control Systems.**

****YOKOYAMA TAKANORI** (1)**

ABSTRACT: The paper describes an **object**--**oriented** development method
for embedded control systems. We present an **object**--**oriented**
model based on a time-triggered architecture which consists of
control-data objects calculating values...

...distributed control systems based on the time-triggered architecture.
Our development tool generates programs whose **code**--sizes are
optimized by removing unused **object**--**oriented** mechanisms. We

· show an automotive distributed system as an example application.

(author abst.)

DESCRIPTORS: **object**-*oriented** design...

>>>KWIC option is not available in file(s): 14, 77

13/3,K/1 (Item 1 from fil : 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

6390836 INSPEC Abstract Number: C1999-12-7420-015

Title: A code generator with application-oriented size optimization for object-oriented embedded control software

Author(s): **Narisawa, F.**; **Naya, H.**; Yokoyama, T.

Author Affiliation: Res. Lab., Hitachi Ltd., Ibaraki, Japan

Conference Title: Object-Oriented Technology. ECOOP'98 Workshop Reader. ECOOP'98 Workshops, Demos, and Posters. Proceedings p.507-10

Editor(s): Demeyer, S.; Bosch, J.

Publisher: Springer-Verlag, Berlin, Germany

Publication Date: 1998 Country of Publication: Germany xxii+573 pp.

ISBN: 3 540 65460 7 Material Identity Number: XX-1999-01939

Conference Title: Object-Oriented Technology. ECOOP'98 Workshop Reader

Conference Date: 20-24 July 1998 Conference Location: Brussels, Belgium

Language: English

Copyright 1999, IEE

Author(s): **Narisawa, F.**; **Naya, H.**; Yokoyama, T.

13/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

5960065 INSPEC Abstract Number: C9808-6110J-034

Title: Object-oriented development based on polymorphism patterns and optimization to reduce executable code size

Author(s): **Naya, H.**; **Narisawa, F.**; Yokoyama, T.; Ohkawa, K.; Amano, M.

Author Affiliation: Res. Lab., Hitachi Ltd., Ibaraki, Japan

Conference Title: Proceedings. Technology of Object-Oriented Languages and Systems, TOOLS 25 (Cat. No.97TB100239) p.68-78

Editor(s): Mingins, C.; Duke, R.; Meyer, B.

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1998 Country of Publication: USA ix+372 pp.

ISBN: 0 8186 8485 2 Material Identity Number: XX98-01479

U.S. Copyright Clearance Center Code: 0 8186 8485.2/98/\$10.00

Conference Title: Proceedings Technology of Object-Oriented Languages and Systems TOOLS 25

Conference Sponsor: Interactive Software Eng

Conference Date: 24-28 Nov. 1997 Conference Location: Melbourne, Vic., Australia

Language: English

Copyright 1998, IEE

Author(s): **Naya, H.**; **Narisawa, F.**; Yokoyama, T.; Ohkawa, K.; Amano, M.

13/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

5222422 INSPEC Abstract Number: A9609-8130F-005

Title: Microstructure and mechanical properties of rapidly solidified

Al-Mn-Cr-Si alloy foils

Author(s): Takeshita, K.; **Naya, H.**

Author Affiliation: Dept. of Mech. Eng., Fukui Univ., Japan

Journal: Journal of the Japan Institute of Metals vol.60, no.2 p. 163-8

Publisher: Japan Inst. Metals,

Publication Date: Feb. 1996 Country of Publication: Japan

CODEN: NIKGAV ISSN: 0021-4876

SICI: 0021-4876(199602)60:2L:163:MMPR;1-I

Material Identity Number: J173-96003

Language: Japanese

Copyright 1996, IEE

Author(s): Takeshita, K.; **Naya, H.**

13/3,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

03871449 INSPEC Abstract Number: B91034994

Title: A new transducer for thermography to observe the electric field distributions in a microwave oven

Author(s): Kashiwa, T.; **Naya, H.**; Fukai, I.

Author Affiliation: Dept. of Electr. Eng., Hokkaido Univ., Sapporo, Japan

Journal: Microwave and Optical Technology Letters vol.4, no.2 p. 81-3

Publication Date: 20 Jan. 1991 Country of Publication: USA

CODEN: MOTLEO ISSN: 0895-2477

U.S. Copyright Clearance Center Code: 0895-2477/91/\$4.00

Language: English

Author(s): Kashiwa, T.; **Naya, H.**; Fukai, I.

13/3,K/5 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

(c) 1999 INIST/CNRS. All rts. reserv.

09331047 PASCAL No.: 91-0121420

(Ages par thermoluminescence des depots de coulées pyroclastiques d'Hakkoda, Prefecture Aomori, nord-est du Japon)

(TL ages of the Hakkoda pyroclastic flow deposits, Aomori Prefecture, Northeast Japan)

TAKASHIMA I; HONDA S; **NAYA H**

Journal: Journal of mineralogy, petrology and economic geology, 1990, 85 (10) 459-468

Language: Japanese Summary Language: English

TAKASHIMA I; HONDA S; **NAYA H**

13/3,K/6 (Item 1 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 1999 Contains copyrighted material. All rts. reserv.

04073061 NEDO-96-912866; EDB-96-156821

Title: Microstructure and mechanical properties of rapidly solidified Al-Mn-Cr-Si alloy foils

Original Title: Kyurei gyokoshita Al-Mn-Cr-Si gokin hakutai no soshiki to kikaiteki seishitsu

Author(s): Takesita, K. (Fukui Univ. (Japan). Faculty of Engineering); **Naya, H. ** (Nisshin Steel Co. Ltd., Tokyo (Japan))

Source: Nippon Kinzoku Gakkaishi (Journal of the Japan Institute of Metals) v 60:2. Coden: NIKGAV ISSN: 0021-4876
 Publication Date: 20 Feb 1996 p 163-168
 Language: Japanese

...Author(s): **Naya, H. ** (Nisshin Steel Co. Ltd., Tokyo (Japan))

13/3,K/7 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPLUS

(c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

02334956 JICST ACCESSION NUMBER: 95A0131992 FILE SEGMENT: JICST-E
Quick and easy monitoring control of loop SW. Loop SW remote monitor and control tool (LSCN) developed.

NARISAWA FUMIO (1)

(1) Nippon Telegr. and Teleph. Corp.

NTT Gijutsu Janaru, 1995, VOL.7, NO.1, PAGE.90-91, FIG.4

JOURNAL NUMBER: F0050BAZ ISSN NO: 0915-2318

UNIVERSAL DECIMAL CLASSIFICATION: 621.391.1

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

NARISAWA FUMIO (1)

13/3,K/8 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPLUS

(c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

01571087 JICST ACCESSION NUMBER: 92A0281388 FILE SEGMENT: JICST-E
A study of an inference control system in a domain shell for electric power with a large-scale system model.

FUKUI CHIHIRO (1); WATANABE TEI (1); **NAYA HIDEMITSU** (1)

(1) Hitachi, Ltd., Hitachi Res. Lab.

Denki Gakkai Zenkoku Taikai Koen Ronbunshu, 1992, VOL.1992, NO.9, PAGE.9.265, FIG.1, REF.1

JOURNAL NUMBER: S0653AAG

UNIVERSAL DECIMAL CLASSIFICATION: 621.311.1

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

FUKUI CHIHIRO (1); WATANABE TEI (1); **NAYA HIDEMITSU** (1)

13/3,K/9 (Item 3 from file: 94)

DIALOG(R)File 94:JICST-EPLUS

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00924308 JICST ACCESSION NUMBER: 90A0128213 FILE SEGMENT: JICST-E
Analysis of pulse response in NRD guide by spatial network method.

TERASHIMA KOJI (1); **NAYA HIDEMITSU** (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)

(1) Hokkaido Univ., Faculty of Engineering

Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu (Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1989, VOL.1989, NO.Spring Pt.2, PAGE.2.540, FIG.4, REF.3

JOURNAL NUMBER: G0508ADY

UNIVERSAL DECIMAL CLASSIFICATION: 621.372.2
 LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
 DOCUMENT TYPE: Conference Proceeding
 ARTICLE TYPE: Short Communication
 MEDIA TYPE: Printed Publication

TERASHIMA KOJI (1); **NAYA HIDEMITSU** (1); YOSHIDA NORINOBU (1); FUKAI
 ICHIRO (1)

13/3,K/10 (Item 4 from file: 94)
 DIALOG(R)File 94:JICST-EPLUS
 (c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

00732188 JICST ACCESSION NUMBER: 89A0421720 FILE SEGMENT: JICST-E
**Three-dimensional transient analysis of cavity with iris by spatial network
 method.**

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIROU (1)
 (1) Hokkaido Univ., Faculty of Engineering
 Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National
 Convention Record, the Institute of Electronics, Information and
 Communication Engineers), 1989, VOL.1989,NO.Spring Pt.2, PAGE.592,
 FIG.4, REF.4

JOURNAL NUMBER: G0508ADY
 UNIVERSAL DECIMAL CLASSIFICATION: 621.372.4
 LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
 DOCUMENT TYPE: Conference Proceeding
 ARTICLE TYPE: Short Communication
 MEDIA TYPE: Printed Publication

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIROU (1)

13/3,K/11 (Item 5 from file: 94)
 DIALOG(R)File 94:JICST-EPLUS
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00729819 JICST ACCESSION NUMBER: 89A0413402 FILE SEGMENT: JICST-E
**Transient analysis of cavity resonance characteristic on spatial network
 method.**

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)
 (1) Hokkaido Univ., Faculty of Engineering
 Denki Gakkai Denjikai Riron Kenkyukai Shiryo, 1989, VOL.EMT-89,NO.32-44,
 PAGE.15-22, FIG.4, TBL.1, REF.7

JOURNAL NUMBER: Z0909AAV
 UNIVERSAL DECIMAL CLASSIFICATION: 621.372.4
 LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
 DOCUMENT TYPE: Conference Proceeding
 ARTICLE TYPE: Original paper
 MEDIA TYPE: Printed Publication

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)

13/3,K/12 (Item 6 from file: 94)
 DIALOG(R)File 94:JICST-EPLUS
 (c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

00711283 JICST ACCESSION NUMBER: 88A0599464 FILE SEGMENT: JICST-E
**Three-dimensional analysis of system involving the cavity by spatial
 network method.**

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)
 (1) Hokkaido Univ., Faculty of Engineering

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku (IEIC Technical Report
(Institute of Electronics, Information and Communication Engineers),
1988, VOL.88, NO.80, PAGE.23-28 (A.P88-28), FIG.9, TBL.1, REF.7

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.372.4

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

****NAYA HIDEMITSU**** (1); **YOSHIDA NORINOBU** (1); **FUKAI ICHIRO** (1)
>>>KWIC option is not available in file(s): 14, 77

14/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 1999 Institution of Electrical Engineers. All rts. reserv.

5421048 INSPEC Abstract Number: C9612-6160J-020

Title: Hitachi Object Database

Author(s): Wakayama, S.; Fukuda, T.; Mori, Y.

Journal: Hitachi Review vol.45, no.3 p.151-4

Publisher: Hitachi,

Publication Date: June 1996 Country of Publication: Japan

CODEN: HITAAQ ISSN: 0018-277X

SICI: 0018-277X(199606)45:3L.151:HOD;1-U

Material Identity Number: H006-96005

Language: English

Copyright 1996, IEE

...Abstract: system (RDBMS). It permanently stores objects that are generated in an application program created using ****object**** ****oriented**** programming. The ****Hitachi**** Object Database (Hitachi ODB) offers high performance and advanced reliability features that are based on...

14/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 1999 Institution of Electrical Engineers. All rts. reserv.

5421047 INSPEC Abstract Number: C9612-7190-064

Title: Application of object-oriented techniques to the development of a transportation management system

Author(s): Yano, J.; Yamamoto, K.; Kajii, K.; Kasama, S.

Journal: Hitachi Review vol.45, no.3 p.139-44

Publisher: Hitachi,

Publication Date: June 1996 Country of Publication: Japan

CODEN: HITAAQ ISSN: 0018-277X

SICI: 0018-277X(199606)45:3L.139:A00T;1-N

Material Identity Number: H006-96005

Language: English

Copyright 1996, IEE

...Abstract: certain inherent characteristics of expert systems, improvements tend to take a long time to implement. ****Hitachi**** has applied ****object****-****oriented**** techniques to the development of a crew diagram expert system for Nishi-Nippon Railroad Co...

... now, this has been a difficult task because the process has not been well defined. ****Hitachi**** selected an ****object****-****oriented**** approach because it provides a step-by-step completion process, and makes it easy to ...

14/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

5421046 INSPEC Abstract Number: C9612-7100-047

Titl : Object-oriented business process analysis and development using groupware

Author(s): Eguchi, Y.; Matsushima, T.; Okamura, A.; Kido, A.

Journal: Hitachi Review vol.45, no.3 p.131-8

Publisher: Hitachi,

Publication Date: June 1996 Country of Publication: Japan

CODEN: HITAAQ ISSN: 0018-277X

SICI: 0018-277X(199606)45:3L.131:OOBP;1-B

Material Identity Number: H006-96005

Language: English

Copyright 1996, IEE

Abstract: ****Hitachi**** has applied ****object**--**oriented**** and groupware technologies to the development of a purchasing system aimed at small- and medium...

14/3,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

5421044 INSPEC Abstract Number: C9612-6110J-037

Title: **Hitachi's **object**--**oriented** system development methodology**

Author(s): Hagi, Y.; Sonehara, M.; Chiba, H.

Journal: Hitachi Review vol.45, no.3 p.119-24

Publisher: Hitachi,

Publication Date: June 1996 Country of Publication: Japan

CODEN: HITAAQ ISSN: 0018-277X

SICI: 0018-277X(199606)45:3L.119:HOOS;1-5

Material Identity Number: H006-96005

Language: English

Copyright 1996, IEE

Title: **Hitachi's **object**--**oriented** system development methodology**

...Abstract: itself to all phases of the development cycle. In response, Hitachi has developed its own ****object** **oriented**** methodology, the ****Hitachi**** Standard Procedure for ****Object** **Oriented**** Development. This methodology has been refined through a process of testing and evaluating certain hypotheses and making improvements based on the findings. The result is the publication of the ****Hitachi**** Standard Procedure for ****Object** **Oriented**** Development.

...Identifiers: ****Hitachi**** Standard Procedure for ****Object** **Oriented**** Development

14/3,K/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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5421041 INSPEC Abstract Number: C9612-6110J-036

Title: **Hitachi's **object**--**oriented** software systems**

Author(s): Maezawa, H.; Hirose, T.

Journal: Hitachi Review vol.45, no.3 p.101-6

Publisher: Hitachi,

Publication Date: June 1996 Country of Publication: Japan

CODEN: HITAAQ ISSN: 0018-277X

SICI: 0018-277X(199606)45:3L.101:HOOS;1-U
 Material Identity Number: H006-96005
 Language: English
 Copyright 1996, IEE

Title: **Hitachi's **object**--**oriented** software systems**

Identifiers: **Hitachi** **object** **oriented** software systems...

14/3,K/6 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

COMP&DISTR 1998 NTIS, INTL COPYRIGHT ALL RIGH. All rts. reserv.

1990866 NTIS Accession Number: PB97-129084

Hitachi Review, Vol. 45, No. 3, June 1996. **Hitachi **Object**--
 Oriented Software Products**

(Bimonthly rept)

Sayama, Y.

Hitachi Ltd., Tokyo (Japan).

Corp. Source Codes: 012206000

cJun 96 66p

Languages: English

Journal Announcement: GRAI9707

See also PB97-129092 and PB96-212774.

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NTIS Prices: PC E08/MF E08

Hitachi Review, Vol. 45, No. 3, June 1996. **Hitachi **Object**--
 Oriented Software Products**

Contents: **Hitachi**'s **Object**--**Oriented** Software System; Global Client/Server Architecture of the 21st Century; Componentware for Network Computing in the 21st Century; **Hitachi**'s **Object**--**Oriented** System Development Methodology; Object-Oriented Enterprise Information System Development Using Groupware; Object-Oriented Business Process...

14/3,K/7 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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12785295 PASCAL No.: 96-0504685

****Hitachi**'s **object**--**oriented** software systems**

MAEZAWA H; HIROSE T

Systems Development Laboratory, Hitachi, Ltd., Japan; Information Systems Group Strategic Business Development Division, Hitachi, Ltd., Japan

Journal: Hitachi review, 1996, 45 (3) 101-106

Language: English

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****Hitachi**'s **object**--**oriented** software systems**

14/3,K/8 (Item 2 from file: 144)

DIALOG(R)File 144:Pascal

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12785201 PASCAL No.: 96-0504587

Application of object-oriented techniques to the development of a transportation management system

YANO J'I; YAMAMOTO K; KAJII K; KASAMA S
 Information Systems Division, Hitachi, Ltd., Japan; Hitachi System
 Engineering, Ltd., Japan
 Journal: Hitachi review, 1996, 45 (3) 139-144
 Language: English

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... of certain inherent characteristics of expert systems, improvements tend to take a long time to implement. ****Hitachi**** has recently applied ****object**--**oriented**** techniques to the development of a crew diagram expert system for Nishi-Nippon Railroad Co., Ltd...

... now, this has been a difficult task because the process has not been well defined. ****Hitachi**** selected an ****object**--**oriented**** approach because it provides a step-by-step completion process, and makes it easy to ...

(14/3,K/9 (Item 3 from file: 144)
 DIALOG(R) File 144:Pascal
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12785198 PASCAL No.: 96-0504584
****Hitachi**'s **object**--**oriented** system development methodology**
 HAGI Y; SONEHARA M; CHIBA H
 Institute of Advanced Business Systems, Hitachi, Ltd., Japan; Information
 Systems Division, Hitachi, Ltd., Japan
 Journal: Hitachi review, 1996, 45 (3) 119-124
 Language: English

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****Hitachi**'s **object**--**oriented** system development methodology**
 ... itself to all phases of the development cycle. In response, Hitachi has developed its own ****object**--**oriented**** methodology, the ****Hitachi**** Standard Procedure for ****Object**--**Oriented**** Development. This methodology has been refined through a process of testing and evaluating certain hypotheses and making improvements based on the findings. The result is the publication of the ****Hitachi**** Standard Procedure for ****Object**--**Oriented**** Development.

(14/3,K/10 (Item 4 from file: 144)
 DIALOG(R) File 144:Pascal
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12785045 PASCAL No.: 96-0504422
Object-oriented business process analysis and development using groupware
 EGUCHI Y; MATSUSHIMA T; OKAMURA A; KIDO A
 Hitachi Software Engineering Co., Ltd., Japan; Corporate Information
 Systems Office, Hitachi, Ltd., Japan; Information Systems Division,
 Hitachi, Ltd., Japan
 Journal: Hitachi review, 1996, 45 (3) 131-138
 Language: English

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****Hitachi**** has applied ****object**--**oriented**** and groupware technologies to the development of a purchasing system aimed at small- and medium...

14/3,K/11 (Item 5 from file: 144)

DIALOG(R)File 144:Pascal

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12785040 PASCAL No.: 96-0504417

Hitachi object database

WAKAYAMA S; FUKUDA T; MORI Y

Software Development Center, Hitachi, Ltd., Japan

Journal: Hitachi review, 1996, 45 (3) 151-154

Language: English

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...system (RDBMS). It permanently stores objects that are generated in an application program created using ****object****-****oriented**** programming. The ****Hitachi**** Object Database (Hitachi ODB) offers high performance and advanced reliability features that are based on...

14/3,K/12 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPLUS

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02745327 JICST ACCESSION NUMBER: 96A0110012 FILE SEGMENT: JICST-E

Object-Oriented Computer-Aided Software Engineering.

TAKADACHI MASATO (1); TOMONAGA KAZUKO (2)

(1) Hitachi, Ltd., System Dev. Lab.; (2) Hitachi, Ltd.

Hitachi Hyoron, 1995, VOL.77,NO.12, PAGE.847-850, FIG.5, REF.3

JOURNAL NUMBER: F0062AAN ISSN NO: 0367-5874 CODEN: HITAA

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02.001

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: System analysisvdesign support tool "SEWB3/OOAD" based on the ****HITACHI**** ****object**** ****orientation**** development standard procedure is now on the market. The developed tool is composed a design...

14/3,K/13 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPLUS

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02745326 JICST ACCESSION NUMBER: 96A0110011 FILE SEGMENT: JICST-E

New Methodology for System Development Using Object-Oriented Technology.

CHIBA HIROYUKI (1); HAGI YOICHI (1); TAKADACHI MASATO (2); HATSUDA KENJI

(2); TAKEDA SHIGERU (2)

(1) Hitachi., Ltd.; (2) Hitachi, Ltd.

Hitachi Hyoron, 1995, VOL.77,NO.12, PAGE.839-842, FIG.6, REF.4

JOURNAL NUMBER: F0062AAN ISSN NO: 0367-5874 CODEN: HITAA

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02.001

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: The ****Hitachi**** ****object**** ****orientation**** development standard procedure" was developed describe know-hoe easily based on past exeprience in analysis...

14/3,K/14 (Item 3 from file: 94)

DIALOG(R)File 94:JICST-EPLUS
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02126682 JICST ACCESSION NUMBER: 95A0400922 FILE SEGMENT: PreJICST-E
Object management facility in **Hitachi **Object***-**Oriented** Database System.**

TOKUNAGA MIKIHICO (1); WAKAYAMA SATOSHI (1); MUNESHIKA HIDEO (2)
(1) Hitachi, Ltd.; (2) H SE J H ED . CE., L .
Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,
PAGE.4.77-4.78
JOURNAL NUMBER: S0731ACN
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

Object management facility in **Hitachi **Object***-**Oriented** Database System.**

14/3,K/15 (Item 4 from file: 94)

DIALOG(R)File 94:JICST-EPLUS
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02126681 JICST ACCESSION NUMBER: 95A0400921 FILE SEGMENT: PreJICST-E
Extended Relationship of **Hitachi **Object***-**Oriented** Database System.**

ASAMI MASATO (1); YAMAMOTO YOICHI (1); KOBAYASHI SUSUMU (1); OKANO KAZUHIRO
(2); FUJII KIYOSHI (3)
(1) Hitachi, Ltd., System Dev. Lab.; (2) H S SE J H , L .; (3)
H EA E EJ
Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,
PAGE.4.73-4.74
JOURNAL NUMBER: S0731ACN
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

Extended Relationship of **Hitachi **Object***-**Oriented** Database System.**

14/3,K/16 (Item 5 from file: 94)

DIALOG(R)File 94:JICST-EPLUS
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02126680 JICST ACCESSION NUMBER: 95A0400920 FILE SEGMENT: PreJICST-E
An Introduction to **Hitachi **Object***-**Oriented** Database System.**

YAMAMOTO YOICHI (1); WAKAYAMA SATOSHI (1); TOKUNAGA MIKIHICO (1); MARUYAMA
TAKEO (1); MUNESHIKA HIDEO (2)
(1) Hitachi, Ltd.; (2) H SE J H ED . CE., L .
Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,
PAGE.4.71-4.72
JOURNAL NUMBER: S0731ACN
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

An Introduction to **Hitachi **Object***-**Oriented** Database System.**

14/3,K/17 (Item 6 from file: 94)

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02125688 JICST ACCESSION NUMBER: 95A0385842 FILE SEGMENT: PreJICST-E

Query facility in **Hitachi **Object**--**Oriented** Dabase System.**

NAMIOKA MIYOKO (1); KIYASU KIYOTAKA (1); YAMAMOTO YOICHI (1); IBE IKUYO
(1); TANAKA HITOSHI (1)

(1) Hitachi, Ltd.

Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,

PAGE.4.75-4.76

JOURNAL NUMBER: S0731ACN

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

MEDIA TYPE: Printed Publication

Query facility in **Hitachi **Object**--**Oriented** Dabase System.**

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